# **Historic, Archive Document**

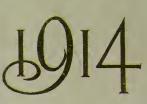
Do not assume content reflects current scientific knowledge, policies, or practices.

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Service In our various departments from fifty to one hundred competent men and women are ac-tively engaged in serving our customers. Among these are practical experts, specially fitted by training and experience to confer with you on any subject pertaining to our business. Their suggestions or recommendations incur no obligation on your part and may save you needless expense and disappointment. You should take advantage of this service.

WHAT OUR DIAMOND TRADE MARK STANDS FOR. By reason of our the experience gained by a quarter century of success in serving the growers of sources of supply. Only by such connections is it possible, in the seed trade, to obtain the select true stocks—the best of the season's production; and when you see our DIAMOND Trade Mark on your packet of seeds or item of merchandise you can feel that it is a mark of real quality—THE BEST OBTAINABLE.

OWNING OUR GROUNDS AND BUILDINGS in the business center of Portland-with our house tracks easily accessible to all railroads - places us in the most advantageous position to render prompt, efficient and economical service.

# Portland Seed Company's COMPLETE SEED ANNUAL

# For 1914

**F**OLLOWING our established policy, we offer in this Catalog only those varieties which in our experience are the most satisfactory and desirable for market and home gardens — listing them truthfully — avoiding exaggerated and extravagant statements.

- IT IS OUR AMBITION to offer only the best seeds possible to obtain, and to make our catalogs trustworthy, useful references. That our policy meets with approval is evidenced by the continued and increasing demand for "Diamond Quality" seeds and supplies.
- THIS, OUR GENERAL CATALOG FOR 1914, has been carefully re-written and greatly enlarged, much useful information having been added, and you will find it the most complete and valuable catalog we have ever issued. As our catalogs are prepared for the convenience of our customers, we would appreciate having such criticisms and suggestions as will help us to increase their usefulness.
- GOOD SEEDS, SQUARE DEALING, RIGHT PRICES and a willingness to anticipate the demands of our trade, have developed our equipment and facilities to their present high standard of efficiency, and with every confidence that our efforts are appreciated we shall spare no expense to serve you faithfully and well. Write us — your inquiries or orders, large or small, will have prompt and courteous attention.

Portland Seed Company

# WHEN AND HOW TO ORDER

SEND in your combined orders for seeds, plants, supplies, etc., at once. We are prepared to fill orders as soon as this Catalog reaches you, and if you do not want all sent now we will send part now and the balance later. The advantage of this is that your order is entered and filled or stock reserved so the complete order or any part can be sent upon notice without delay. If you want part or all of your order held, state it distinctly with date when shipment is to be made. All orders for potatoes, plants, and other perishable goods are carefully booked on receipt, and filled in rotation as soon as weather permits. If shipped early, they are at buyer's risk.

- BE SURE TO SIGN YOUR NAME, giving Postoffice and State. Do not write letters on the same sheet as orders.
- USE ORDER BLANK in the front of your Catalog, carefully filling out the blank spaces at the top for shipping directions.
- **SEEDS POSTPAID BY MAIL.** We send all vegetable and flower seeds in quantities of one pound or less by mail, postpaid, to any Postoffice in the United States, at the prices\_named in this Catalog unless otherwise stated.
- **BY FREIGHT OR EXPRESS.** In ordering vegetable or flower seeds to be sent by freight or express at your expense, deduct 10c per pound from single pound postpaid prices.
- **PREPAY STATIONS.** When you send in orders to go by freight or express be sure that you add money enough to pay freight charges if your station is a prepay point, which is **always the case** where there is no regular agent.
- LARGE ORDERS. Any dealer, market gardener, institution or individual wishing seed in large quantities, is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market prices. A letter of inquiry may save you dollars if you want to buy in quantity.
- **COMPLAINTS OR PRAISES.** If you are well pleased with our goods and the manner of doing business, tell everyone. If you are not, tell us, so we can please you. Our best efforts will be put forth in filling all orders carefully and promptly in a way that will please you.
- USE MONEY-ORDERS, POSTOFFICE OR EXPRESS, Bank Drafts or Registered Letters. DO NOT send *personal checks* as your order may be delayed for their collection or identification. Stamps will be accepted on small orders.

### BE SURE TO ORDER EARLY—BEFORE STOCKS ARE DEPLETED.

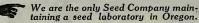
NOTE.— We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.— We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, trees, or plants sent out and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once.— Portland Seed Company.

# **VEGETABLE SEEDS**

IAMOND QUALITY seeds are grown especially for us from selected strains of varieties that years of trial and observation have proven to be most satisfactory for home and market gardens. Many of our seed crops are grown under our personal supervision — others come from the world's great centers of seed production of Europe and America where conditions are most favorable for their perfect development.

### "DIAMOND QUALITY SEEDS" are Tested Seeds

To further guard the interests of our customers and maintain our standard of excellence, we have installed a modern seed laboratory, equipped as recommended by the U. S. Dept. of Agriculture, placing in charge a certified seed analyst. It is here that final tests and inspection are made, and only those seeds that are *above* the standards are offered to the public and bear our **Diamond Trade Mark** — the mark of quality that stamps them as the best obtainable.





A corner of our seed laboratory

our

# General Notes on Planting and Culture

W<sup>E</sup> have marked those varieties that mature early with this little Diamond, trade mark. This will aid you in the selections for your home garden.

If you live in Northwestern Oregon or Washington you will have better success with your garden by planting these early maturing varieties after the Spring weather is settled and the ground warm, than if you planted very early, as many seeds will not give the best results in the cold damp of the early Spring, and even if they live, the plants may be stunted and not grow. These suggestions are only general, as you will note that many special sorts can be planted very early.

If you live in the Willamette Valley or Southern Oregon you can plant almost anything as early as the condition of the soil will permit.

Do not work the soil when it is wet, as this has a tendency to make it lump and bake and may put it in such shape that nothing can thrive in it. Wait until it is just dry enough to crumble away nicely when turned over, and if you will press the dirt firmly down on the seeds, getting right in the row and tramping the soil down with your feet — they will germinate quickly even in comparatively dry soil. Any extra work in carefully preparing the soil will more than repay you in the increased results, and always remember that constant and thorough cultivation is almost equal to water and fertilizer both, and will insure a good crop even in a dry season, and on ordinary soil.

Plan your plantings and keep a garden book or record of some sort, for by so doing you will get the utmost pleasure and profit from your garden and as the seasons pass you will find this record an invaluable aid and reference work. You will soon learn what varieties are best for your requirements and to identify your favorites, and when buying seeds or plants you will know just what to order.

If you are in doubt about what you should do, or want any special information, be sure to write to us. We will be pleased to give your inquiries our careful attention, and advise you to the full extent of our knowledge.

BOOKS AN UP-TO-DATE REFERENCE BOOK will save the beginner many times its cost and will suggest improved methods to the experienced. See list of standard Reference and Text Books.



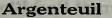
# ASPARAGUS

Asparagus is one of the earliest Spring vegetables, and would be in universal use were it not for the mistaken idea that it is difficult to grow. In reality it can be produced very easily and cheaply. A bed 15x50 feet, requiring about 100 plants, should give an abundant supply for the average family.

**CULTURE.**— Soak the seeds 24 hours in warm water, and sow early in drills one foot apart. An ounce of seed will sow about 300 feet of drill. Keep the soil mellow and free from weeds. After one year's growth, transplant into permanent beds that have been carefully prepared by working to a depth of 24 inches, manuring deeply, using old manure and bone meal; 5 feet is a convenient width for a bed that will carry three rows, and can be reached without treading upon it. Set the plants about 18 inches apart in the rows and spreading the roots out, firming the soil down on them. If your soil is well drained the bed may be level, but if not it must be elevated a little. Give a good dressing of well rotted manure after planting and an occasional application of salt or brine. In the Fall when the foliage turns yellow, cut it off and give a dressing of manure ogood commercial fertilizer. A warm, sandy soil is the best

and one which has for some years been cultivated in garden crops and heavily manured is greatly preferred to a fresh soil. But at no period of its growth should the asparagus crop be allowed to lack for manuring. From one to two years' time can be saved by buying roots of us. See plant department.

7260 roots will plant an acre.



A popular French asparagus of great merit; larger and superior to Palmetto; of vigorous, even growth; very early and free from disease.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.

### **Connover's Colossal**

A large and rapid grower of excellent quality. Makes large uniform stalks of finest quality. This is the famous "Bouldin Island" Asparagus, a superior canning variety.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 65c.

# **Columbian Mammoth White**

A newer, distinct and valuable variety. The stalks are white, of the largest size; very productive and early.

Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 65c.

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(THE

### Palmetto

The favorite green asparagus. Extra early and the uniformly large stalks remain tender longer than any other variety, being in prime condition for some days after coming above the ground. Palmetto is disease resistant, and a heavy sure cropper.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 65c.



ASPARACUS by Hexamer 168 Pages 55c Postpaid.

increases in value each year

### ASPARAGUS PLANTS-Four Best Varieties.

ONE-YEAR OLD PLANTS — Postpaid, 25c dozen, 75c per 50, \$1.00 per 100. By express or freight, 20c dozen, 50c per 50, 75c per 100, \$6.00 per 1000.

TWO-YEAR OLD PLANTS—Postpaid, 40cper dozen, \$1.00 per 50, \$1.50 per 100. By express or freight, 25c per dozen, 75c per 50, \$1.00 per 100, \$8.00 per 1000.

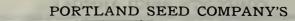
Artichoke Large Green Globe.

The variety used as a table vegetable. The edible portion is the thick end of leaf of the flower head. Sow early in drills and when about ten inches high transplant into rows four feet apart each way. It will produce only a small crop the first year, but will continue in good bearing five years. Cut before the bud opens. The seedlings are variable and for market gardening they are generally propagated from cuttings.

The buds when in blossom resemble huge thistles and the foliage being highly ornamental, this variety is much used for hedges and display in parkings. Pkt., 5c; oz., 35c.

### Jerusalem .--- White.

Distinct from the globe; produces tubers like potato; grown in the same way. A fine vegetable for table and also valuable as hog feed. Price and description under Field Seeds.



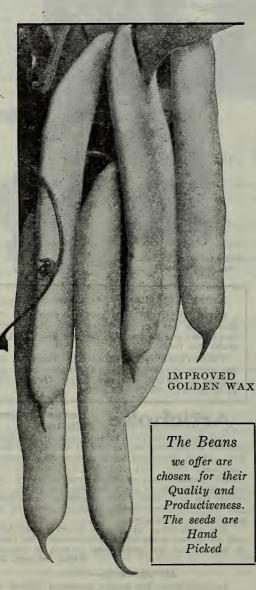
BEANS

Our general selection of varieties include those that have given best average yield, are most hardy and will give best results in their respective classes.

CULTURE.— The soil best adapted for growing beans is a light, rich, well-drained loam, which was well manured for the previous crop. If the ground is too freshly manured, the plants are apt to run to vines and set few blossoms. Plant in drills about two inches deep and from eighteen inches to two feet apart, as soon as the ground is dry enough and warm—about May 1st, or later, and for succession up to July 15th. Beans are very sensitive to cold and wet before they have sprouted, but are not so liable to be damaged after they are above ground.

When ordering beans by mail add 10c per pound for postage

# Wax or Yellow Podded Kinds **DWARF OR BUSH VARIETIES**



### Pencil Pod Black Wax

"Pencil Pod" is the most satisfactory of the early dwarf Wax Beans.

Of dwarf, bushy growth, about fifteen inches high, large luxuriant foliage, beneath which in great clusters will be found an enormous crop of beautiful straight yellow pods six to seven inches long, well rounded, deeply "saddle backed," meaty and solid clear through; they are brittle, of rich mild flavor, and **entirely stringless.** An early, sure cropper; of the finest quality. Pkt., 10c; lb., 20c; 10 lbs., \$1.75

# Golden Wax-Improved

A splendid improvement over the popular Golden Wax. Beans are very uniform, of a bright golden yellow, about four inches long, rather flat. The meaty pods are crisp, tender and entirely stringless. Bush grows stiffly erect and bears enormously. **Pkt.**, 10c; 1b., 20c; 10 lbs., \$1.50. stringless. enormously.

### Golden Wax

Very hardy and productive. Our stock of this popular standard variety is extra choice.

Pkt., 10c; lb., 15c; 10 lbs., \$1.35

### **Davis Wax**

Rustless and immensely productive, very hardy and one of the best for market gardeners. The dried bean is kidney-shaped, clear white, and a favorite for baking and canning.

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

# Wardwell's Kidney Wax

Vines are of medium size, with long, flat pods of a delicate waxy yellow, very brittle and entirely stringless. We specially recommend this bean.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

# Improved Prolific Black Wax

Market gardeners and others to whom earliness is a matter of prime importance cannot afford to be without this, which is truly the "earliest of all" wax beans. **Pkt., 10c; lb., 20c; 10 lbs., \$1.75.** 

MARKET GARDENERS - The As paragus Bean is a smoother, handsomer, better quality bean than Kentucky Wonder, therefore a more profitable, better seller.- See page 7.

### COMPLETE SEED ANNUAL

# **BEANS**-Continued

### **Dwarf or Bush-Green Podded Kind**

# When ordering beans by mail add 10c per pound for postage

### Stringless Green Pod.

The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than any other greenpodded bean. It is of immense value, not only to the market gardener, but also for those who seek early beans of a rare quality for the home table. **Pkt., 10c; lb., 15c; 10 lbs., \$1.25**.

### Extra Early Red Valentine.

This improved strain has a healthy, vigorous growth. The Beans are small, but the pods are thick, round and fleshy; very tender, rich and quite stringless. A popular bean for canning green. Bush grows to a height of fifteen inches and is very prolific. Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Refugee, or Thousand To One.

Of great value on account of its hardiness, vigorous growth and wonderful productiveness. Is not excelled by any other variety as a snap bean, and is considered the best for pickling or canning. Beans small, dark purple, veined brown. Pods of perfect form, dark green, veined purple. **Pkt., 10c; lb., 20c; 10 lbs., \$1.75**.

### White Navy.

Grown extensively for marketing dry shelled. The best known small white bean. Dwarf in growth and very productive. **Pkt.**, 10c; lb., 15c; 10 lbs., 85c.

FRL., 10C; ID., 15C; 10 IDS., 86

### Canadian Wonder.

This splendid bush bean is the largest, most prolific of the greenpodded sorts, and is entirely stringless in its early development. Comes a little later than the New Stringless Green Pod, but continues in bearing throughout the season, and is excellent shelled green. **Pkt., 10c; lb., 15c; 10 lbs., \$1.25.** 

### Dwarf Horticultural. or "Cranberry Bean"

Grows erect, strong and shrubby, and is very prolific. The bean is highly prized, green shelled. It is rather large, plump, and beautifully mottled yellow and red; one of the most delicious and desirable beans and a great favorite with market gardeners.

Pkt., 10c; lb., 15c; 10 lbs., \$1.35

### Lady Washington.

Sturdy, bushy plant, erect habit. The bean is large, broad and is a great improvement over the old "Navy" being much earlier, a little larger, and a very heavy yielder, being especially adapted to our Western soils, and is entirely free from disease. Bush attains a height of about fourteen inches, and beans mature in September.

Pkt., 10c; lb., 15c; 10 lbs., 85c.

### Broad Windsor.

Stalk erect, strong and shrubby. The bean is large, broad and flat; should be planted early and is best green shelled. An English variety. **Pkt.**, 10c; 1b., 15c; 10 lbs., \$1.25

### **Castor Bean.**

Used for medicinal purposes and by some claimed to keep moles away. Castor beans are very ornamental, the plants and foliage being large and tropical in appearance. **Pkt.**, 10c; lb., 25c. Dwarf Horticultural or "Cranberry Bean" 5

Our No. 1 Best Fertilizer for Beans

# **BEANS**—Continued

# Lima Beans-- Tall and Dwarf

**CULTURE.**— Lima beans require a warm, rich loam that drains well, as the seed will rot if planted in damp, cold soil. The soil must contain plenty of humus and commercial fertilizer, or well rotted manure should be worked in when cultivating. The Pole Limas require about the same treatment as other Pole Beans. The Dwarf or Bush Limas should be planted in rows two to three feet apart - six to eight inches in the row.

Oregon Pole Lima is the only variety that has given satisfactory results in the cool climate of Western Oregon and Washington, where they thrive and yield enormously in any good garden soil.

Oregon Pole Lima can be grown without poles, but a support is a better protection to the beans, which would spoil on the ground in wet weather.

**OREGON POLE LIMA**—See Cover Illustration

The only Lima Bean to thrive in our cool climate

Oregon Pole Lima grows a strong, thrifty vine and is very prolific, bearing continuously until frost, the blossoms bursting from the top should in long panicles, while the pols can be seen in every stage of devel-opment, to the matured beans at the bottom of the vine. Pods are well filled, having three to five large beans of the finest quality. Gather any time after full maturity.

Oregon Pole Lima can be planted in any garden soil as early as April or late as July. Give the same care and culture as other Beans, and they are ready to use when the pods are filled and first begin to ripen. It is not necessary that they should dry on the vines, except for seed.

They are at their best when the full green pods begin to turn yellow.

Try "Oregon Pole Lima." It is a wonder, sure to grow, and will produce more fine beans of delicious table quality than any variety we know of. Price per pkt., 15c; 1/4 lb., 25c; 1 lb., 60c, postpaid.

### Burpee's Bush Lima.

Beans as large and as fine in quality as the pole varieties. It is also a heavy yielder. Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

Vine tall growing; pods long, broad, very thin, dark green; beans large, kidney shaped, greenishwhite, flat. Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Large White Pole Lima.

### From a Man Who Knows.

Vapavine, Wash., 9-24-'13. Gentlemen:--- Wish to compliment your house on the Oregon Pole Lima Beans. I bought a small packet last Spring and on new land, raw, and no fertilizer of any kind, they have done remarkably well. I never saw such plump, large Limas and I have cooked a great many bushel of them, having been a cook for 22 years. In fact, all seeds sent me were entirely satisfactor

W. D. FERGUSON.

No. 1 Diamond Fertilizer for Beans - ASK FOR OUR FERTILIZER BOOK



6

### COMPLETE SEED ANNUAL



LAZY WIFE -- A splendid

Pole Bean for Home

Gardens.

# **Climbing or Pole Beans**

FIf ordering by mail add 10c per pound for postage

**CULTURE.**— Do not plant until the soil has become warm and the weather settled — and always remember beans should have rich, *well drained* soil. It is best to set the poles before planting; these should be six to eight feet high, rows about four feet each way. Plant four to six beans to the hill and thin to two or three, depending on the variety. If trellis is used, sow in hills about one to two feet apart in the row. A pound should plant 75 to 100 hills. A top dressing of commercial fertilizer or old manure should be worked in when cultivating.

### Asparagus. (See color plate page 17)

The True Asparagus Bean is superior to Kentucky Wonder in quality and fully equal in productiveness. The long, slender pods are very fleshy, almost round, crisp, tender and delicious, of a beautiful pale green color, attractive form and absolutely stringless. No bean equals them either for market or home use. They grow vigorously and bear heavily, the vines being literally covered with great clusters of shapely pods. Asparagus beans are profitable and heavy producers for market or garden, but owing to their fleshy pods are a difficult seed crop to produce and the demand has always exceeded the supply.

Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

### Kentucky Wonder.

A vigorous climber; very prolific, bearing in clusters; extremely long and very fleshy, succulent pods; flat, thick and remarkably tender. A firstclass pole variety.

Pkt., 10c; lb., 15c; 10 lbs., \$1.15.

### Indian Chief, or Tall Black Wax.

Remarkable for its fine, tender and succulent pods, which are produced in great abundance. Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

#### **Dutch Case Knife.**

Good corn hill bean; very early; pods long and flat; beans white; used green or dry. Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

### White Crease Back.

A good, early, green-podded pole bean. Pods are light green, six inches long and round with a decided crease in the back; are entirely stringless and of excellent quality.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

### Lazy Wife.

Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless; of unusually rich flavor. Dry beans, pure white; excellent for Winter use. **Pkt.**, 10c; 1b., 20c; 10 lbs., \$1.50.

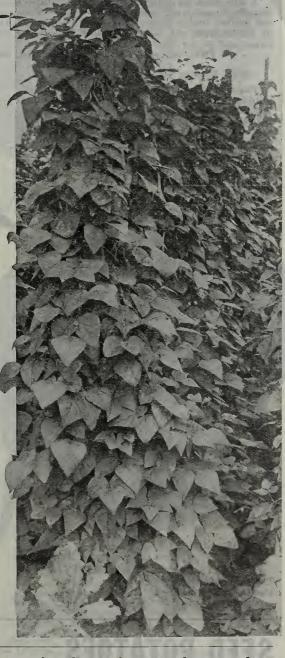
### London Horticultural. The "Cranberry Pole Bean

Very desirable for the family garden. Vines vigorous: pods green, streaked with red. Bean large, oval, cream colored, beautifully splashed with red. Has no superior, green, shelled or dry. Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

#### Scarlet Runner.

A favorite as a shell bean and for its flowers, which are bright scarlet; seeds broad and kidney shaped. **Pkt.**, 10c; lb., 25c; 10 lbs., \$2.00.

All of our Beans and Peas are "hand picked."



MARKET GARDENERS -- Please write for prices on large orders

### PORTLAND SEED COMPANY'S

BEETS

CULTURE .-- The Beet is hardy and may be planted as soon as the ground can be well prepared. doing best in rich, sandy soil, sown in rows sixteen inches apart, covered one and one-half inches deep, The seed will sprout better if soaked twenty-four hours in warm water before planting. Thin out by using the largest ones when they are of sufficient size, continuing until they are six or eight inches apart in the rows. For field crop, the rows should be far enough apart to permit the use of a horse cultivator.

### P. S. Co.'s Market Gardener.

The new, extra early Beet is remarkable for its fine quality and rapid growth; it is of deep red color and handsome shape; as an early market sort it is unrivaled. It is to a large extent superseding the Egyptian, being earlier in development, more attractive in appearance and of superior quality for the table. Market gardeners prefer it. **Pkt., 5c; oz., 15c; ½ ib., 35c; ib., \$1.00.** 

MARKET GARDENER

EGYPTIAN

### **Detroit Dark Red Turnip.**

A fine Beet for bunching for market; tops exceptionally small and uniformly upright. The are perfect turnip shape with small taproots. The roots One of the deepest red beets. Quality is of the finest; sweet and tender, best beet for home gardens.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.

### Extra Early Egyptian

The best variety for forcing, and for market gardeners, being very early with small tops. Roots very dark red, rounded on top, but flat beneath, with very small tap roots.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

THE BEST FERTILIZER FOR BEETS IS **Diamond No. 4** ASK FOR OUR FERTILIZER BOOK - FREE

ECLIPSE

### Early Eclipse.

One of the best early sorts. It possesses all the qualities requisite in a first-class beet, and is of a uniform, globular shape. The roots are a bright, glossy red, fine-grained and delicious.

Pkt., 5c; oz., 10c; ¼lb., 25c; lb., 65c.

### Early Blood Turnip—Improved

An extra selected stock of blood turnip having larger, coarser tops and roots than the Detroit Dark Red, and requiring a longer time to mature. Excellent for Summer and Autumn use.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 65c.

### Long Smooth Dark Blood.

The leading late variety, keeping well all Win-ter. Should be planted in rich, warm soil to secure rapid growth, which makes them tender. Top small, root long and smooth. Flesh deep purple, fine and sweet.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

### Half Long Blood.

A new variety of excellent quality. One of the very best for Winter use; does not become woody and keeps as well as the Long Dark Blood. The root is smooth and handsome, and the flesh is brilliant in color and as good in quality as the best Blood Turnip varieties. Give it a trial.

Pkt., 5c; oz., 10c; ¼lb., 20c; lb., 60c

DETROIT

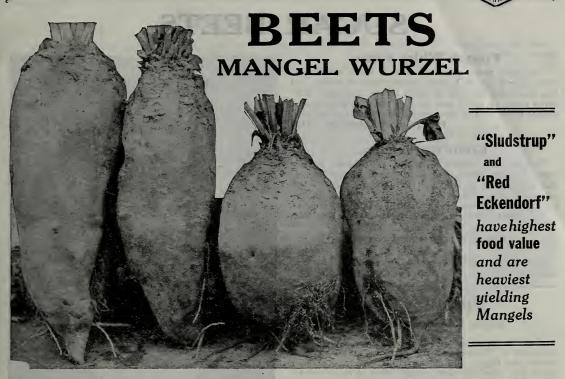
or Market

Three Splendid

Varieties for Home

**SEED POTATOES** For over 15 years we have been growing Seed Potatoes by careful selection and the varieties we offer will give you the maximum crop of salable tubers. **SEE PAGES 44-45**.

### COMPLETE SEED ANNUAL



YELLOW GIANT "SLUDSTRUP" GOLDEN TANKARD "ECKENDORF"

These are grown extensively for stock feeding, and afford large quantities of fresh, nutritious and whole-some food during the Winter months, in connection with grain and dried forage. Sugar beets are richer and sweeter than Mangels, but the latter will generally produce one-third to one-half heavier crops per acre, and hence are preferred by many farmers.

### **Danish Sludstrup**

This new Mangel comes highly recommended. Our seed is direct from the originator. We give his descriptions as follows: Long, reddish-yellow, grows well above the ground, and is easy to pull. Has repeatedly been awarded a first class certificate by the Danish Government and is doubtless the best Mangel in the world.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c. Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.75.

#### Danish Red Giant Eckendorf

Is of straight, cylindrical form, very blunt, and grows mostly above the surface. Awarded a firstclass certificate as a very heavy cropper.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c.

Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.75.

Improved Danish Intermediate-Taaroje-Best for Heavy Soils

Large, smooth, oval shaped mangel that grows high above the ground and is easily harvested. For very heavy soils this variety is preferable to the "Sludstrup." The food value is very high, the yield large. Special awards and first-class cer-tificate by the Danish government. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 55c. Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.75.

### New Mangel Half Sugar.

A new variety, more valuable for feeding purposes than the old sorts, it being very much richer. In addition to this, the size and form have been improved until it yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots large, very smooth, with few rootlets; creamy white in color, with medium sized tops.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c. Not postpaid, 5 lbs., \$2.00; 10 lbs., \$3.25. Yellow Globe.

Finest type of yellow Globe in cultivation. Roots immense size, fine shape, small tap root, neat top. Flesh being very firm and fine grained, renders it Well adapted to an excellent keeping variety. shallow soils.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. Not postpaid, 5 lbs., \$1.75; 10 lbs., \$3.00.

# Mammoth Long Red.

An improvement on the Long Red. It stands head and shoulders above all other varieties of Mangels; unequaled for yielding and feeding qualities. Grows to a very large size, and will yield 50 tons per acre with ordinary cultivation. If you want a large crop of large Mangels of good quality, don't fail to try this sort. Very uniform, smooth and of good shape. Should be grown in deep loose soil. Pkt., 5c; oz., 10c; ½ lb., 15c; lb., 50c. Not postpaid, 5 lbs., \$1.75; 10 lbs., \$3.00.

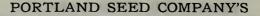
### Yellow Giant, Intermediate, or Gate Post.

Roots very large, growing over one-half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short. We think perhaps this is the best of the short. yellow fleshed beets, because its fine flesh never becomes woody and its roots grow so well out of the ground that the crop is easily harvested. An enormous cropper.

# Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. Not postpaid, 5 lbs., \$1.75; 10 lbs., \$3.00. Golden Tankard.

Considered indispensable by many dairy farmers. They state that they are able to obtain a higher rice for milk when feeding cows on Golden Tan-kard. Sheep thrive on it. Golden Tankard is of a rich, deep yellow throughout. Early, hardy and a heavy cropper; on account of its shape the roots can

be left standing close in rows. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. Not postpaid, 5 lbs., \$1.75; 10 lbs., \$3.00.





# SUGAR BEETS

### French White Sugar.

The sort most generally grown as it combines, with heavy yield, a good percentage of sugar. It has produced 30 tons of beets to the acre, and contains from 10 to 13 per cent of sugar. The largest yields known have been obtained from this variety. **Pkt., 5c; oz., 10c; lb., 35c.** 

### Klein Wanzleben.

This is the variety which is considered best in Germany for producing sugar, and is now taking the lead in this country for this purpose. Our stock of seed is imported direct from one of the most careful German growers, and will give the best results. **Pkt.**, 5c; oz., 10c; ½ lb., 15c; lb., 35c.

### Lane's Imperial Sugar.

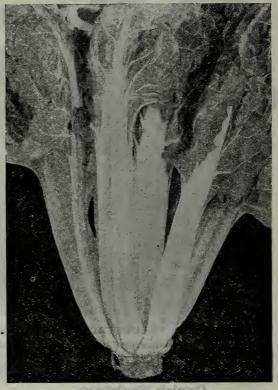
This is an excellent variety and one of the best for stock feeding. **Pkt., 5c; oz., 10c; lb., 35c.** 

# Spinach Beet

### Swiss Chard or Sea Kale

New Savoyed Leaf "LUCULLUS." A wonderful new sort of "Spinach-Beet," growing about two and a half feet high. The heavy stalks are over an inch thick and bare for more than a foot of their length. Should be served as you would asparagus and are a great delicacy. The leaves make the finest of "greens." Swiss chard is hardy, easily grown and should be in every garden. It is one of the most delicious of all vegetables.

Pkt., 5c; oz., 15c; ¼ lb., 40c



SWISS CHARD

# BROCCOLI

or Winter Cauliflower

Broccoli is very much like cauliflower in general appearance and growth, but is hardier and will stand more cold and frost. Produces fine heads from late in the Fall until early Spring, according to time plants are set out. It is a very profitable crop, and is now being planted extensively. Culture same as for late Cauliflower.

### St. Valentine The Finest of All Broccoli.

This grand new strain introduced by us is a sure header of immense size, finest quality, and is ready for market in February. The large, solid, handsome, white heads remain in good condition onger than other varieties.

Pkt., 10c; ¼oz., 40c; 1 oz., \$1.00.

### Large White French.

A valuable variety with large, white heads, firm and of good flavor.

Pkt., 5c; oz., 40c; 1/2 lb., \$1.25.

# **Vegetable Plants**

Thrifty, well grown, true to name. Standard varieties in any quantity for seasonable delivery. SEE PLANT DEPT.

ST. VALENTINE BROCCOLI

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# **Brussels** Sprouts

The plants, which are very hardy, grow two or three feet high, and produce, from the sides of the stalks numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the Fall, to give the little heads more room to grow. They should be treated in all respects like Winter cabbage or kale.

### **Odense Market**

An improved Danish variety, producing in greatest abundance firm, shapely sprouts, thickly set around the entire stalk; will stand a severe Winter, and is unsurpassed for market or home garden. Pkt., 10c; oz., 35c: 1/4 lb., \$1.00

### **Dwarf** Improved.

A carefully grown strain, very hardy and giving compact, round sprouts of large size and good quality.

Pkt., 5c; oz., 10c; ¼ lb., 35c.

### LOOK over our **BOOK** list

# Chervil---Curled.

This plant is used for flavoring soups and salads, and has a strong perfume.

Pkt., 5c; oz., 10c; 1/4 lb., 30c.

# Cress

### Curled, or Pepper Grass.

This salad is much-used with lettuce, to which its warm, pungent taste make an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early, but repeated sowings are necessary to secure a succession. Keep off insects by dusting with Pyrethrum Powder. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

### True Water.

This is quite distinct from the former, and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads, and should be planted wherever a suitable place can be found. The seed should be sown and lightly covered in gravelly, mucky lands, along the borders of small, rapid streams, and the plants will need no subsequent culture, as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots.

Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

### From the Cauliflower Growers.

C. W. Kruse, Oswego, Oregon, reports for two seasons,- on a large acreage of "Mt. Hood" cauliflower — that the 1912 crop was the best he had grown up to that time. Fully 90 % developing perfectly. But the 1913 crop exceed all records — over 97 % developing salable heads of the finest guality.

Anton Neilson, Oswego, reports a field of Danish Giant dry weather cauliflower as averaging above 8 inches across and practically every plant heading

For Diamond Quality Cauliflower Seed See Page 12



# **Corn Salad** Fetticus, or Lamb's Lettuce.

A refreshing salad, used extensively in Winter and Spring as a substitute for lettuce. It is often cooked like spinach. Sown in drills one foot apart. in the Spring or Fall. On the approach of cold weather cover over with straw or coarse litter. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.

# Collards True Georgia.

Used as "Greens" mainly in the South and

West. As the leaves are pulled off, others grow in their places. **Pkt., 5c; oz., 15c;** ½ **lb., 30c.** 



See Vegetable Plant List We supply all vegetable plants in season.



WATER CRESS



# CAULIFLOWER

MT. HOOD EARLY SNOWBALL

Mt. Hood Early Snowball Grown by C.W. Kruse the "Cauliflower King"

> **CULTURE** — The Cauliflower succeeds well in any soil where cabbage will grow. But best results are obtained in rich loam with an abundance of water. By sowing early varieties in a hot bed in February or March, or later in a cold frame, fine heads can be obtained quite early. For a later supply, sow seed in a prepared bed in May, choosing a cool, moist place. When large enough, transplant, making the rows about two and a half feet apart and eighteen inches between the plants. In dry seasons the crop must be watered.

### P. S. Co.'s "Mt. Hood" Early Snowball

The seed that produces those handsome large white solid heads that bring big profits to the gardener. We offer our "Mt. Hood" Cauliflower seed in sealed packets only, under our own label, it having been carefully selected and grown for us by one of the very few expert Cauliflower growers, and is the best strain of Early Snowball obtainable. We especially recommend "Mt. Hood" Snowball for either early or late planting.

Pkt., 25c; 1/2 oz., \$1.50; oz., \$2.50.

### Selcted Extra Early Dwarf Erfurt

Remarkable for reliability in heading. Very dwarf, with solid, pure white heads of superior quality. If planted the first of March, heads nine to twelve inches in diameter will be ready early in June. **Pkt., 5c;** ½ oz., 65c; oz., \$2.00.

### Early Erfurt.

Ordinary strain. Pkt., 5c; oz., 85c; 1/4 lb. \$3.00.

### Early Snowball.

Ordinary strain. This is the regular grade of Early Snowball that is generally offered, and while it will not give as good results as "Mt. Hood," can be depended upon to produce a good crop. **Pkt., 5c; oz., \$2.00;** ½ **lb., \$6.00**.

### Danish Giant,-Dry weather Cauliflower

Danish Giant is an early, large, solid white Cauliflower that can successfully withstand a drouth that would prove fatal to other varieties and will thrive splendidly in dry sections, being peculiarly adapted to their growing conditions, but like all cauliflower must have rich soil and cultivation to give best results. Danish Giant can also be grown under moist conditions and is a dependable market variety. If your location is subject to drouth or you are "dry farming," be sure to plant Danish Giant.

### Pkt., 20c; ¼ oz., 60c; oz., \$2.00; ¼ lb., \$6.50.

### Large Algiers.

A valuable late sort, sure to head, of the best quality and very popular with market gardeners everywhere. Plants large, but of upright growth, the leaves protecting the heads so that they will endure, uninjured, a frost that would ruin other sorts. One of the very best of the late varieties.

Pkt., 5c; oz., 60c; 1/4 lb., \$1.75.

#### Autumn Giant.

The heads are white, large, compact and thoroughly protected by foliage.

Pkt., 5c; oz., 50c; ¼ lb., \$1.50.

**DON'T BUY** cheap strains of Cauliflower Seed. Only the best select strains can be depended upon to produce a big percentage of large, white, solid heads.

PLANTS IN SEASON

> CO.'S "FIRST CROP."

**CULTURE.**— The requisites for complete success are: First — Good seed. There is no other vegetable where

CABBAGE

the seed has so much in-fluence on the quality of the product, and gardeners should always use the best procur-able. Second — Rich, well prepared ground. Third -Frequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deeply. Cabbage is universally grown and specific directions regarding the time and method

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of planting applicable to all localtiles cannot be given. In general, the early sorts should be sown very early in hot beds, hardened off by gradually exposing to outside air, and as early as the ground is in good condition, transplanted, setting 18 to 36 inches apart, accord-ing to size of variety. The late Autumn and Winter varieties may be sown from the middle to the last of Spring and transplanted when four to six inches high. Shade and water the late

sowings in dry weather to get them up.

TI is important that the plants should not be crowded in the seed bed, or they will run up weak and slender and be likely to make long stems-

### P. S. Co. First Crop. The Ideal Early Cabbage

The earliest of all pointed varieties and an ideal sort for the private or market gardener,

First crop being ten days ahead of any other cabbage, takes but little room, and produces fine, solid heads. We advise all our customers to try this new variety for we believe it is a *sterling novelty* of the greatest value.

### Pkt., 5c; oz., 25c; 1/4 lb., 60c.

### 

### Early Jersey Wakefield.

The favorite Early Cabbage with our market gard-eners. A sure header. The thick, stout leaves and compact habit make it the best for Wintering over very early setting. and

Grown more extensively for market than any other early cabbage. Is always of good size, very solid, and has but few outside leaves; a reliable header and always gives good satisfaction.

Pkt., 5c; oz., 20c; 1/4 lb., 50c; lb., \$1.50.

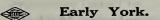
#### Extra Early Express.

Produces medium-sized, pointed heads, in 80 to 85 days from sowing of seed. Pkt., 5c; oz., 20c; ½ lb., 50c; lb., \$1.50.

### Early Spring. The Earliest Flat-Headed Variety.

A wonderfully compact plant, with few outer leaves, so that a great number of fine, solid heads can be produced on an acre. Although it does not come to full maturity as early as Jersey Wakefield it becomes solid enough for use about as early, and is by far the best early sort for those markets that demand a large round or flat cabbage. The plant is vigorous, with short stem. The heads are oval and very large for the size of the plant.

Pkt., 5c; oz., 20c; 1/4 lb., 50c; lb., \$1.50.



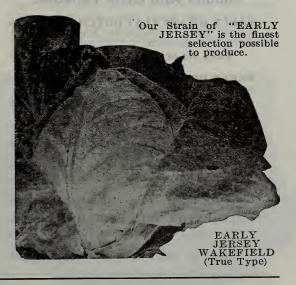
Small, but very early; very popular sort. Can be planted close together.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

### Henderson's Early Summer.

About ten days later than the Jersey Wakefield. The head is round, and the largest of the early kinds; can be set close in a row, as the outer leaves are small. It remains long without bursting: is firm and of the best quality.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.40.



If you grow cabbage, kale, cauiflower, celery-you need a MASTER'S PLANTER Price \$4.50. Endorsed by the Washington State Experiment Station, Bulletin No. 6.



# **CABBAGE**—Continued

# FERTILIZE

your cabbage with

# Diamond No. 10

Promotes a quick even growth, developing crisp, solid heads that command the "Top of the Market"

COPEN-HAGEN MARKET

#### ¢ **Copenhagen Market** A Splendid Cabbage for Home Gardens

A new extra early globe-shaped Cabbage slightly flattened. The large solid heads are very uniform. with few outer leaves, keeps well and stands handling. *Copenhagen Market* originated in Den-mark, where it is the favorite market variety, and we recommend it to our customers as the best early round head. Gardeners should give it a trial. Our stock is direct from the originator.

Pkt., 15c; oz., 50c.

### **Popular And Early Varieties.**

EARLY DWARF FLAT DUTCH. Grows low on the stem; a sure header; firm, fine grained, tender and excellent.

Pkt., 5c; oz., 20c; 1/4 lb., 50c; lb., \$1.50.

EARLY DRUMHEAD. Heads slightly flattened; do not crack; keep well.

Pkt., 5c; oz., 20c; 1/4 lb., 50c; lb., \$1.50.

SUREHEAD. Sure to head; compact; medium to large.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50.

SUCCESSION, OR ALL SEASONS. Heads large, slightly flattened; grows low on the stem.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50.

CHARLESTON, OR LARGE WAKEFIELD. Large and a little later than the Early Jersey Wakefield

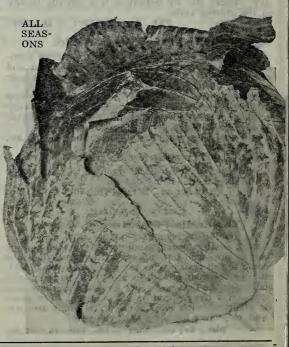
Pkt., 5c; oz., 20c; 1/4 lb., 50c; lb., \$1.50.



### Early Winnigstadt.

A desirable variety, having conical, solid heads; a sure header under almost any conditions, and keeps better than most early varieties. Fine appearance and of excellent quality.

Pkt., 5c; oz., 15c; 1/4 lb., 50c; lb., \$1.50.



Cabbage Plants Well grown stocky plants, properly hardened off--all stan dard sorts in season. Prompt deliveries at right prices SEE PLANT DEPARTMENT.

# **CABBAGE--Continued** Late Varieties



FIELD "DIAMOND BALL HEAD" Grown bv T. L. Evans using our Commercial Fertilizers

OUR FREE BOOK,

**"FERTILERS "** 

will help you to do as well.

### **Diamond Ball Head**

An improved Danish Ball Head, re-selected for many years by our grower, who has been successful in securing a perfect late market sort of just the right size and finest quality. Heads are a little flatter than the older strain and stems shorter, color lighter green, but showing the characteristic reddish veins on the outer leaves. Solid, crisp, and of remarkable uniformity; market growers will get more perfect salable heads from "Diamond" Ball Head than from any other late cabbage.

Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

### Autumn King or World Beater.

A sure header, very solid, fine-grained and tender. It grows quicker than any other large cabbage and will produce more to the acre. Color, dark green, with a slight bronze or brownish tinge to the outer leaves. The heads are remarkably thick through, and will attain a great weight. Has a short stem and grows near the ground.

Pkt., 5c; oz., 20c; 1/4 lb., 50c; lb., \$1.50.

- PREMIUM LATE DRUMHEAD. Has no superior in any respect for family and market purposes, either for medium, early or late crop. Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50.
- MAMMOTH ROCK RED. Used for pickling. The heads are very fine and remarkably sure heading.

Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$1.75.

DRUMHEAD SAVOY. Large, compact heads: crisp and tender with a rich flavor. Desirable for cooking or salads.

Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$1.75.

Get a Masters Plant Setter One man can set and water 10,000 plants in a day.

Price, \$4.50

### **Premium Late Flat Dutch.**

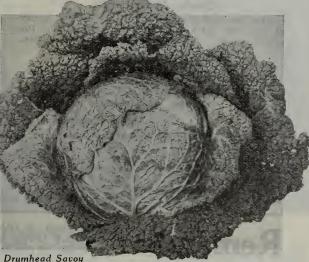
This is superior to any other late cabbage in cultivation, when large areas are planted for ship-ping. It possesses all the good qualities of the Late Flat Dutch, and is a sure header.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50.

#### Danish Ball Head or Hollander.

This is one of the hardiest cabbages in cultivation and endures both frost and drouth that would destroy other varieties.

Plants rather long-stemmed, but compact; leaves very smooth, but thick; head of medium size, round and very solid, being the hardest heading cabbage we know of, and of the very best quality. Matures quite late, keeps well, and is considered by many the best cabbage to hold over for Spring markets. Pkt., 5c; oz., 20c; 1/4 lb., 50c; lb., \$1.75.



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# SWEET CORN

CULTURE .-- Corn should not be planted until the ground is warm, as the seed will rot in cold, damp soil, or if planted too deep. Late April is early enough for first plantings and for succession plant every two weeks through May and June. Cover the first planting very lightly, increasing the depth a little for the later plantings. For the Dwarf Early varieties, rows should be three feet apart; for later large varieties, four feet, and the hills two to three feet in the rows.

Sweet or Sugar varieties are used both for table and stock feeding, some of the large later sorts being preferred for silos and fodder.

Field Varieties are grown for fodder and for ensilage in the Pacific Northwest more than for grain, but of recent years improved early varieties have given good results and splendid crops are reported from many sections where it was thought corn could not be grown.

### Add 10c to lb. Price for Postage on Corn.

### Golden West-Oregon Grown Seed

The richest, sweetest corn ever grown-To be sure of the right strain, look for our Diamond trade mark on every package.

Our "Golden West" Corn, a selection from the original strain of Golden Bantam, produces a larger ear has a more vigorous growth, and by continued careful selection, improves yearly. We believe it to be the richest, sweetest, best yielding early sweet corn nothing having ever been produced that will compare with it in any way. Golden West is extremely hardy, can be planted earlier than other varieties, and, being of dwarf habit, can be planted closer than other sorts. It is the very best corn for market or home gardens, where earliness and quality are considered. The color is a rich, creamy yellow, deepening to golden as it matures, and the quality is so fine that you must try it to appreciate how good corn can be.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

### **Oregon Evergreen**

We offer **Oregon Evergreen** as the finest main crop Sweet Corn. The flavor and sweetness can not be excelled and the extreme whiteness of the large ears makes it very beautiful and valuable for canning. It is large and the stalks produce more ears than any other variety and have a very heavy husk over the grains, protecting them from insects and keeping the ear fresh a long time after cutting.

Oregon Evergreen is a hardy, vigorous grower and is the ideal Corn for market gardeners. Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

### Livingston's Early Sugar

A grand new "dry weather" corn. Even after severe drouth, the stalks look as fresh and green as in the Spring and the ears are well filled and perfect. In favorable seasons it will produce ears fit for table in 60 days from planting. Ears averaging 7 inches long contain from 12 to 14 rows of deliciously sweet, pure white kernels on white cob.

Sixty per cent of stalks in the field carry two perfect ears. They are of faultless shape, invariably filled well to the tips.

Livingston's Early Sugar does not stool, but produces strong, sturdy plants which resist wind admirably. They stand up well, average 6 feet tall and furnish an abundance of fine fodder.

Pkt., 10c; lb., 25c.

### Early Minnesota.

This old and deservedly popular variety is one of the best early sorts for the market and the Pkt., 10c; lb., 15c; 10 lbs., 90c. private garden.

### Stowell's Evergreen.

Remarkable for remaining a long time in a esh condition suitable for the table. Hardy and fresh condition suitable for the table. productive, and the best late variety for general Pkt., 10c; lb., 15c; 10 lbs., 90c. use.

Peep O'Day.

# Ten Days Earlier Than Any Other -- Sweet, Early, Productive

For flavor, sweetness and productiveness it is ahead of any other early white sweet corn. It will prove a money-maker for the market gardener, and a valuable addition to our list of corn for our short Western Summers.

### Pkt., 10c; lb., 15c; 10 lbs., \$1.00. Early White Cory.

MAMMOTH

The stalks are no larger than those of the White Cob Cory, but each stalk furnishes two or more large, fine-shaped ears, which are fit for use before those of most other sorts. The ears are 12-rowed, very symmetrical and handsome. The grain is large, broad, very white and of remarkably good quality. **Pkt., 10c; lb., 15c; 10 lbs. 90c.** 

### Early Evergreen.

The Best Second Early Sweet Corn

In the New Early Evergreen we have a selection possessing every good quality of Stowell's Evergreen, and resembling it in every respect, except that the stalk is about one foot shorter, more closely jointed, and that it will mature for market ten to fourteen days earlier.

Pkt., 10c; lb., 15c; 10 lbs., 90c.

### Well-Known and Standard Varieties.

SAll varieties 10c per packet, postpaid.—Add 10c to pound price if wanted by mail.

Per lb.	Per 10 lbs.
ADAMS' EXTRA EARLY. Not sugar corn; small ears for early use10c	\$0.90
BLACK MEXICAN. Black grains, sweet and delicious; fine for home use15c	1.00
COUNTRY GENTLEMAN. The sweetest and most tender of all Sweet Corns15c	1.25
MAMMOTH SWEET. Very large, white grain; early and productive15c	.90

Remember The rich flavor and sweetness of corn disappear ouickly after gathering and to be at its best should be used at once.



From Photos of Three Superb Vegetables for Home and Market Gardens. CHALK'S EARLY JEWEL. Most satisfactory and dependable Comato. Smooth, solid, uniform, heavy yielding, quality unsurpassed. See Page 38. From Photos of Three Superb Vegetables for Home and Market Gardens. GOLDEN WEST. Grown in Oregon. The sweetest, richest, best yielding early Sweet Corn. Hardy, quick growing, can be planted early. See opposite page. The sweetest of the sweetest planted early. See opposite page.



**E**VERY ONION PLANTED for the production of our famous OREGON YELLOW DANVERS ONION SEED is carefully selected to type, color and size, then placed in the row for inspection before being covered. This is expensive but has made our special strain of Oregon Yellow Danvers the most uniform, heaviest yielding Danver's Onion. Illustrations are from photos of our seed fields. SEE PAGE 30.



# **Field Corn**

\*HERE is no longer any doubt as to Corn being grown successfully in the Northwest, and careful tests have proven the following to be adaptable to our coast climate. As a fodder crop corn cannot be excelled and cut green and packed in silos it makes a valuable green feed for milch cows.

The past season was the most successful one in the Pacific Northwest and there is much enthusiasm expressed at this time over the future possibilities of corn growing.

Of the many varieties tested Minnesota No. 13 and Northwestern Dent have given most encouraging results and we have added them to our list of varieties that seem best adapted to to this section.

Pound prices on Corn do not include postage: add 10c extra per pound if wanted by mail.

### Minnesota No. 13-Yellow Dent

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SIL

A variety of great promise, being the earliest of the early yellow dent corns and reported to be the heaviest yielding. Producing splendid large ears, closely filled from end to end with bright yellow kernels. Has rather a thick cob and the shelled grains have a tendency to irregularity. Minnesota No. 13 will average 7 feet high and being a rapid, vigorous grower, with heavy foliage, makes a fine fodder corn. Will mature in 90 days under favorable conditions. Price: 1 lb., 15c; 10 lbs., \$1.00.

### Northwestern Dent-"Smoky Dent"

This is a red corn with yellow dent or cap and in high altitudes and the Northern sections where seasons are short will often mature a crop when other varieties fail. Its extreme earliness and rapid growth make it valuable for late planting and for replanting. Ears are 7 to 10 inches closely filled; grows 7 to 8 feet high. Of 40 varieties on trial reported at the Montana Experiment Station, Northwestern Red Dent was in the lead with yields as high as 63 bushels per acre. A cross of King Philip red and Minnesota yellow dent. Be sure to try this valuable new corn. **1.1b.**, **15c; 10 lbs., \$1.00**.

### Minnesota King (Dent).

Recommended by the Agricultural College as the best variety for Western Oregon and Washington. Smallest cob and largest grain. bulk of ears than any other variety. Golden yellow and a good yielder. **1 lb., 10c; 10 lbs., 65c.** 

### Pride Of The North, or Yellow Dent

Recommended after repeated tests, by the Agricultural College, as the best for Eastern Oregon, Washington and Idaho. A quick growing dent variety, thriving well where the Summers are not very long Bright golden color. **1** lb., 10c; 10 lbs., 60c

### Wisconsin White Dent.

Wisconsin White Dent is a large handsome White Dent, extremely early and matures perfectly, and is the best White Dent Corn for Ore-gon and Washington. 1 lb., 10c; 10 lbs., 50c.

### **Champion White Pearl.**

A large, white late dent variety; very popular with our dairy-men on account of the great amount of green feed it makes.

1 lb., 10c; 10 lbs., 50c.

### Australian White Flint.

A growing test of three seasons has demonstrated the adaptability of this valuable variety to Northwestern conditions. It is earlier than the well-known "Eight-Row Canada," and is to be preferred on account of its color, productiveness and very early ripening.

1 lb., 10c; 10 lbs., 60c.

# Well Known and Standard Varieties

ALL SORTS OF FIELD CORN 10c PER PACKET; PRICES PER 100 POUNDS ON REQUEST

Minnesota No. 13

EARLY CANADA (Flint). An eight-rowed Yellow Flint Corn; early and very pro- Perlb.	Per 10 lbs.
ductive	\$0.60
KING PHILIP. An early Red Flint Corn; well acclimated and well known 10c	. 60
<b>LEAMING</b> (Early). Yellow Dent; grain small; weighty; productive	. 50
<b>EARLY WHITE FLINT.</b> Productive, early and of beautiful appearance	. 50
FODDER SWEET CORN. Mixture for soiling and green fodder 10c	. 60
WHITE RICE. Pop Corn. Best variety for popping corn	.75



# CARROTS

ARROTS, aside from being one of our most useful and easily grown garden vegetables, are invaluable for stock feeding. They are greatly relished, promote health and put a sleek coat on cattle or horses, giving a well-kept appearance. Dairy and stockmen should grow them extensively. For their special use we recommend our Yellow Giant.

**CULTURE.**— A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the Spring as the ground is fit to work, though good crops may be grown from sowing as late as June 15. For table use, sow the smaller kinds in rows 16 to 18 inches apart, and for field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see to it that the soil is well firmed above the seed.



CHANTENAY

### Earliest Short Horn, or French.

The earliest variety in cultivation, and best suited for forcing. Roots, reddish brown, globular and about two inches in diameter; should be used before full grown.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.

PORTLAND SEED COS MEROVED LONG ORANGE

### Early Scarlet Horn

The best early kind for general use. It is larger than the forcing variety, but fully as good in quality, and produces a much

larger crop.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 90c.

### **Oxheart**.

A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor.

Pkt., 5c; oz., 10c; ¼ lb., 25c; Ib., 70c.

# Chantenay.

### The Market Gardner's Favorite.

Tops, medium sized; necks, small; roots, tapering slightly, but uniformly stump-rooted and smooth; color, deep orange red; flesh, very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any; is a heavy cropper, and is **undoubtedly one** of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 70c.

### Danver's Half Long,

Grown largely on account of its productiveness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, hand-some roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts, and are more easily harvested. **Pkt., 5c; oz., 10c;** ¼ **lb., 25c; lb., 65c.** 

### St. Valery.

A popular French Carrot of a deep, rich orange red color, with very straight roots, broad at the top and tapering abruptly near the point. Average length 10 to 12 inches, foliage small. The table quality is excellent and the fact that it yields heavily in light soil makes it useful as a stock carrot. We consider it a valuable variety.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

### Portland Seed Co.'s Improved Long Orange.

Popular for farm use on deep, mellow soil. Our stock is an improve-ment obtained by years of careful selection of the best formed and deepest colored roots, which grow to a large size, some specimens averaging twelve inches in length. Enormous crops can be grown under fair culture; one of the best varieties for feeding stock. Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb. 65c.

#### CARROTS. USE DIAMOND No. 1 FERTILIZER FOR

Our Book "FERTILIZERS" tells you how to profitably use fertilizer. Tells you what you should get for your money when you buy Fertilizers—a book every grower should have and is FREE FOR THE ASKING



# **CARROTS**-Continued Good and Productive Stock Carrots

Carrots are a sure and profitable crop for dairy and stock-men — and "Yellow Giant." is the most profitable. heaviest yielding varietu— Tru it.

Port-seed a

"Kow Kure" PORT. SEED CO'S Makes poor cows good cows good -YELLOW GIANT better See Index.

**Portland Seed Company's Yellow Giant** 

### Specially Adapted to Moist, Heavy Solls

This new Carrot originated at the Sydney, Australia, Experimental Station, and has proved itself to be the earliest and most productive stock carrot offered to date. It is a half long variety, with an immense broad shoulder. The Carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is of bright yellow, and is **perfection itself** for giving the proper color to butter. Every dairyman who wants a big crop of carrots of the right quality and easy of culture should plant our Yellow Giant.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

### Improved Short White-"Mastodon' **Of Excellent Table Quality**

Ranks as a field carrot, owing to its enormous productiveness and the ease with which its enormous harvested. Roots half long, smooth, very heavy at the shoulder, but tapering regularly at the point; color, light green at the crown, white be-low; flesh, rich, white, solid, crisp and of excellent flavor. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

### Large White Belgian.

Extensively grown for stock feeding; very pro-ductive. Grows so much above the ground that the entire crop can be pulled by hand. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 60c.

#### Yellow Belgian.

Large root; yellow flesh; good keeper for late Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 65c. feeding.

# **CUCUMBERS**

**CULTURE.**— Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills four feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, whether required for use or not, as their ripening soon destroys the vine's usefulness.



### Telegraph. Forcing

A standard forcing variety, very popular with gardeners. Fruit fourteen to sixteen inches long, of very fine quality. A sure and heavy cropper. Pkt., 25c.

### Early Russian.

Earliest and hardiest. Very vigorous and productive. Fruit three to four inches long, thick, oval, pointed at each end, and covered with fine, small spines. **Pkt.**, **5c**; oz., **10c**; ½ **lb**. **25c**; **lb**., **75c**.

#### Early Cluster.

Fine, vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. A very productive sort. Pkt., 5c; oz., 10c; ½ lb., 25c; lb., 75c.

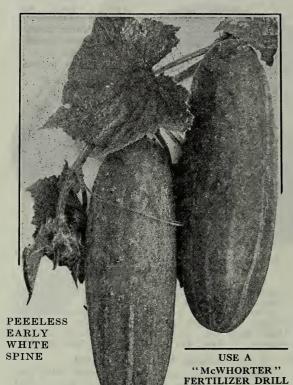
# Short Green, or Early Frame.

An excellent sort for both table use and pickling. with crisp, tender flesh. Comes into use a little later than the Early Cluster and keeps green a long Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c. time.



# **CUCUMBERS**—Continued

FOR EARLIEST VARIETIES AND CULTURAL NOTES SEE PAGE 21



### "The Davis Perfect" Cucumber.

The "Davis Perfect" is of perfect form, large size and of the finest color; is crisp, delicious and almost seedless.

The "Davis Perfect" is as handsome, grown outside, as any hothouse Cucumber.

Mr. Davis is the originator of the Davis Wax Bean and the Grand Rapids Forcing Lettuce. His Cucumber is equally valuable.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.

See Index



LEMON CUCUMBER

### **Gherkin For Pickling.**

A very small, oval, prickly variety, quite distinct from all others. **Pkt., 5c; oz., 20c;** ½ **lb., 60c.** 

### "Diamond" Long Green.

The leading large variety. Fruit from ten to twelve inches long, dark green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles. We offer our "Diamond Strain"— they will grow long and uniform in shape. **Pkt., 5c; oz., 10c;** ½ **lb., 25c; lb., 75c.** 

### Peerless, or Early White Spine.

One of the best sorts for table use, fruiting early and abundantly. Fruit uniformly straight and handsome; light green, with a few white spines. **Pkt.**, **5c**; oz., **10c**; ½ **lb.**, **25c**; **lb.**, **70c**.

### Boston Pickling, or Green Prolific.

Color, bright green, and a great producer. The fruits average four to five inches in length when large enough for slicing, and are of excellent quality; but it is for producing medium sized pickles that this variety is so highly esteemed.

### Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 70c.

### **Cumberland Pickling.**

The vines are hardy, strong, and fruit very freely. The straight young fruits possess the distinctly roughened surface so much desired for small pickles. The large fruits average nine to ten inches in length, two and a half inches in diameter, with full rounded ends, and are of good quality for slicing

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.



"DAVIS PERFECT"

### Lemon Cucumber.

This dainty little cucumber resembles a lemon both in form and color, having a distinctive flavor superior to and not found in any other cucumber. The Lemon Cucumber is so prolific that a single vine will be ample for the needs of the average family. It is also said that the Lemon Cucumber can be eaten without fear of the harmful results that some experience from eating cucumbers.

Pkt., 5c; oz., 25c; 1/4 lb., 75c; lb., \$2.00.

### Japanese Climbing.

A useful variety for growing on a trellis or wire. The cucumbers are long, of a dark green color, white flesh, crisp, and of a good flavor. **Pkt.**, 10c; oz., 15c; ½ lb., 50c.

For Cucumbers "DIAMOND No. 10" will repay its cost many times over. Let us send you our FREE BOOK "FERTILIZERS"



# CELERY

**CULTURE.**— Sow the seeds early, about February, in a hot-bed or cold frame. When three inches high, transplant, setting them four inches apart. When grown six inches, and fine, stocky plants, set in richly manured, deep soil, in rows three and a half feet apart and about nine inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Blanche by placing boards along the rows, or earth up a little, and continue doing so at intervals until only the tops of the leaves are visible late in Autumn. Never hoe up the earth when plants are wet. One ounce of seed produces about six thousand plants. SEE FOOTNOTE.

**A** 

### White Plume.

### The Leading White Celery

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white, so that by closing the stalks either by tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of "banking" or "earthing up." It is the earliest celery known.

Pkt., 5c; oz., 20c; 1/4 lb., 65c; lb., \$2.00.

### Golden Yellow Self-Blanching.

This is no doubt the best celery for early Spring market use. Plants of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier.

Pkt., 10c; oz., 60c; ¼ lb., \$2.00.

### Large White Solid.

Of vigorous growth, white, crisp, tender; fine, nutty flavor.

Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$1.75.

### Golden Heart, or Golden Dwarf.

Solid, of fine, nutty flavor; excellent. Pkt., 5c; oz., 15c; ½ lb., 50c; lb., \$1.50.

### Winter Queen

This is without doubt the most valuable variety of celery for Winter and Spring use ever introduced. Has double the amount of heart of any known celery. The plant has a fine appearance, of compact growth, and blanches to a beautiful cream-white. Ribs perfectly solid, crisp and a delicious nutty flavor.

Stored for Winter or Spring use, it is an excellent keeper and when taken out the blanched stalks will be firm and crisp; entirely free from strings; brittle and of sweet flavor.

Pkt., 10c; oz., 35c; 2 ozs., 65c; ¼ lb., \$1.00.

### Giant Pascal.

Largest variety grown; of fine, nutty flavor; very easily blanched. **Pkt., 5c; oz., 15c;** ½ lb., 50c; lb., \$1.50.

Celery Seed. For flavoring Oz., 10c; ¼ lb., 15c; lb., 50c.

CELERIAC

TURNIP ROOTED

CELERY

### **CEI ERIAC**

Turnip Rooted Celery Large Smooth Prague Improved form with very few side roots. The largest and best variety.

Pkt., 5c; oz., 20c; ¼ lb., 60c.

**To Succeed with Celery** you must keep your plants growing constantly while young, if you allow them to "stand still" they will run up to seed later. Always cultivate as soon after watering as the ground is dry enough to work well. Fertilize heavily in the spring—and use nitrate later if needed.

No. 4 DIAMOND FERTILIZER FOR CELERY-Read our Fertilizer Book. Mailed free on request

CELERY PLANTS

VHITE LUME

Large Healthy Transplanted Plants in Standard Varieties for Delivery in Season. Any Number at Right Prices.

See Plant Department



### PORTLAND SEED COMPANY'S

# CHICORY

The culture is the same as for Extensively used to adulterate coffee and as a substitute for it. carrots. Dig at about the same time as carrots, wash, slice, and dry by artificial heat. The blanched leaves are used by some for salad.

LARGE ROOTED OR COFFEE-The best kind.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

# EGG PLANT

Should be started in a hotbed and transplanted when the weather is settled and the ground thoroughly warm. They will thrive with the same treatment as that given the tomato.

#### **Black Beauty**

An extra early, quick-growing, vigorous variety, handsome and very uniform. Color, deep blackish purple. Splendid market sort.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25; lb., \$4.00. Early Long Purple.

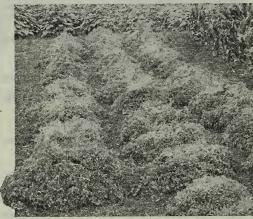
The earliest and hardiest; very productive; fruit from six to ten inches ng. **Pkt., 5c; oz., 30c;** ½ lb., 75c. long.

### New York Improved, Large Purple.

The leading market variety. Large, round, dark, excellent and the most productive. Pkt., 5c; oz., 30c; 1/4 lb., \$1.00.

### Black Pekin.

Oval, round; of medium size, very dark, glossy and handsome. Pkt., 5c; oz., 30c; 1/4 lb., 80c.



BLACK BEAUTY

# ENDIVE

This is a hardy vegetable, cultivated principally for a Winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.

### **Broad Leaved Batavian** (Escarolle)

Has broad, thick leaves, which form a large, ose head. **Pkt., 5c; oz., 10c;** ½ **lb., 30c.** loose head.

### White Curled.

A beautiful variety, with curled, mossy leaves, r early use. **Pkt., 5c; oz., 10c;** ½ **lb., 30c.** for early use.

### Green Curled.

Standard sort for Fall and Winter. Pkt., 5c; oz., 10c; 1/4 lb., 30c.

as "multiplier onions" dividing the little clump planting each bulblet.. Lb., 20c, postpaid, 30c.

partment.



# Kohl Rabi

Hardy and of easy culture. Grown from plants the same as cabbage. The Kohl Rabi is a vegetable intermediate between the cabbage and turnip, and combines the flavor of both. The edible part is a turnip-shaped bulb formed by the swelling of the stem. Kohl Rabi is far superior to cabbage or turnips in the delicacy of its flavor, and is a splendid addition to every garden. It should be eaten before growth ceases.

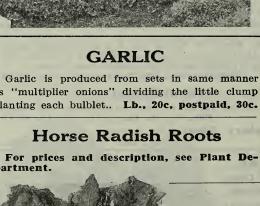
### Early White Vienna.

Very early; bulb white; best table variety. Pkt., 5c; oz., 20c; 1/4 lb., 60c.

### **Early Purple Vienna**

Same as above, except in color, which is purple.

Pkt., 5c; oz., 20c; ¼ lb., 60c.



### COMPLETE SEED ANNUAL

# KALE

### Emerald Isle. Finest Kale in the World.

This is really the handsomest Kale that has ever come under our notice; and is entirely distinct from other strains, very hardy, of medium height, and very vigorous, throwing out new shoots as fast as the leaves are used, and will furnish excellent greens all Winter. The closely curled, handsome leaves are most attractive and of fine flavor. A fine exhibition plant. Pkt., 10c; oz., 15c; 1/4 lb., 30c.

### Tall Green Curled Scotch.

Grows about two feet high; leaves dark green, curled and wrinkled; very hardy and is improved by a light frost.

Pkt., 5c; oz., 10c; 1/4 lb., 25c. HALF DWARF MOSS CURLED. Me-

dium sized leaves, nicely curled. Pkt., 5c; oz., 10c; ¼ lb., 30c. DWARF GREEN CURLED. Leaves beauti-

fully curled and bright green. Pkt., 5c; oz., 10c; 1/4 lb., 25c.

# LEEK

The Leek belongs to the Onion family. Prized for soups. Cultivation similar to that of onions, but should be hilled up about the neck to blanch it.

### Large Rouen, or American Flag.

A large, favorite American sort. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

### For Thousand Headed Kale-See Field Seeds.

### MUSTARD

Mustard is used alone as "greens," or with cress as salad. Sow any time in the Spring, in rows, and thin out as necessary.

### **Fordhook Curled**

Beautiful dark green, finely curled plume-like leaves that are of distinctive flavor; superior to spinach as greens and is fine for salads. Fordhook Curled is vigorous and productive. Pkt., 5c; oz., 10c; ½ lb., 30c; lb., 90c.

SOUTHERN GIANT CURLED. We offer a fine strain of the true curled leaf.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. WHITE ENGLISH. Leaves mild, tender when young; seeds yellow. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 40c.

### Mushroom Spawn

With intelligent care and good spawn, Mushrooms can be made to pay handsomely. They can be successfully grown in a dry cellar, under the benches of a greenhouse, or in sheds, where the temperature can be kept from 50 to 60 degrees through the Winter. Our free pamphlet gives general instruction.

### Lambert's Pure Culture.

A new kind of spawn, without a doubt the best; much superior to the common English. It comes in bricks, weighing about 20 ounces. These are broken up into pieces the size of a walnut and put into the bed one foot apart each way. Price, per brick, 25c; postpaid, 40c; by express, not prepaid, 5 bricks, \$1,00.

MUSHROOMS. How to Grow Them. By Falconer. 162 pages. Postpaid, \$1.10 MUSHROOM CULTURE and Pure Culture Spawn. 32 pages. 35c. Postpaid

### **Chinese Mustard**

Less pungent than other varieties, Chinese Mustard is most delicious, thriving at the same season and under conditions that are favorable to spinach. A splendid addition to our gardens. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.





**LETTUCE** is so extensively grown that cultural directions seem unnecessary, but we offer a few simple suggestions that may save a later disappointment, as any failure is generally blamed to the seed. This should not be, as Lettuce, like many other vegetables, requires very rich soil, plenty of water, a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the Spring, and the weather turns dry and hot, they will run up to seed without heading. The same seed sown in the Fall or with cooler growing weather would develop perfectly. At a temperature of 40 degrees or lower lettuce will not thrive. At 65 degrees and upward it has a tendency to run up and not head properly. For outside planting sow the seed in shallow drills from one to two ounces to the 100 yards. An ounce will produce 3,000 plants. Four pounds should plant an acre. Lettuce matures in forty to sixty days from time of planting.

### New York or Wonderful

This is the mammoth head lettuce so popular in California from whence it is shipped to the Northern markets, arriving in splendid condition. The immense heads are solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. The quality is unsurpassed, being tender, crisp and sweet. New York is a hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head.

Pkt., 5c; oz., 15c; 1/4 lb., 50c; lb., \$1.50.

### May King.

A large growing, smooth leaved, richly flavored sort, which we believe will be the best of all smooth leaved Lettuces. Plant, light green, with round leaves, which form into a very solid, compact, round head; stands a long time without running to seed. Leaves very thick, folded or puckered at the base, inner ones blanch to a rich, golden yellow. **Exceedingly rich, tender and buttery.** Fine for open ground or forcing. For succession plant in Spring, then in August and again in September. **Pkt., 5c; oz., 15c;** ½ **lb., 35c.** 

### P. S. Co.'s "Diamond Early."

Earliest, solid, surest heading of the early head varieties. The fine, large heads are tightly folded, having few outer leaves, which are of a light green color, the inner ones being blanched to a beautiful buttery yellow.

"Diamond Early" is the ideal lettuce for early heads or successive planting, and its rich flavor and quality is unsurpassed.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$1.25.

# Portland Seed Company's New

Our "New Crispette" is a beautiful lettuce, the quality of which is simply perfect. The large, curly leaves, which cover the outside of the solid heads, are of a bright, light green. The unusual solidity of the heads is insured by the large, white main ribs of the leaves, each of which curving strongly toward the center, makes it impossible for the leaves to open outward and expose the center, which will always be found crisp, tender, sweet and melting. It matters not whether grown to head in the early Spring or the hottest days of Summer, the leaves are always **crisp and tender**.

Pkt., 5c; oz., 15c; 1/4 lb., 30c; lb., \$1.00.

#### All Seasons.

A valuable new "Butter Head" Lettuce; the best main crop variety, as its large heads continue to grow for two or three weeks after they are ready to use, and are very slow to seed. The heads are flattened on the top and very broad, often measuring eight inches across.

"All Seasons" is headed up ready for use in less than ten weeks from planting. Color of outer leaves is a bright green, with inner leaves blanched a rich golden yellow: very crisp and of excellent flavor. Be sure to try "All Seasons."

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.

### Salamander For Hot Dry Sections.

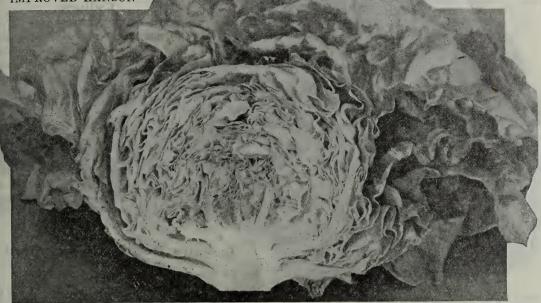
A fine medium early lettuce of good size, forms compact heads, crisp, tender and of a fine buttery flavor. Creamy white head with outer color light green; stands drouth well and is slow to seed.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

### COMPLETE SEED ANNUAL

### LETTUCE-Continued

IMPROVED HANSON



#### Hanson.

#### **Improved Hard Heading Stock.**

One of the very best. Heads green outside and white inside; grow to a remarkable size, very solid, and is deliciously sweet, crisp and tender. It withstands the hot sun well. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25.

### **California Cream Butter**

A fine large butter head lettuce of the richest flavor, tender, sweet and crisp; a great favorite in California, being a popular market variety, medium early. The heads are very broad, often measuring eight inches across and continue to grow for two or three weeks after they are ready to use, and are very slow to seed.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

### Henderson's Immensity.

Of the largest size and finest quality, even the outer leaves being tender. Slow to run to seed and maintains that crispness of texture and sweetness of flavor so much desired, and has heat-resisting qualities which carry it safely through the hot Summer. It is not early, but is absolutely reliable for a late crop at a season when other varieties are hard to procure.

Pkt., 5c; oz., 15c; 1/4 lb., 35c.

### Brown Dutch.

Forms a large, solid head, sweet, tender and of Outer leaves are tinged with brown. good flavor. Very hardy.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., \$1.25.

#### Deacon.

Heads very solid and of excellent flavor, remains in condition for use as long as any variety in cultivation. Plant medium sized, with very few outer leaves, which are deep green and very thick, while the inner ones blanch to a bright yellow and are exceedingly well flavored, crisp and tender. This is certainly one of the best varieties for Summer use.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

### Grand Rapids- For Early Forcing.

As a Lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list. Of quick growth, and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, light yellowish green leaves, slightly crimped and blistered, rather thin, good flavor, crisp and tender. It will stand shipping better than most curled sorts. Pkt., 5c; oz., 15c; ½ lb., 35c; lb., \$1.25.

### Early Prize Head.

Standard sort; one of the best thin leaved, clustering varieties. The very large leaves are savoyed or crimped, bright green, tinged with red, and are exceedingly tender, crisp and sweet, forming a large, loose head. One of the best for the garden, but not good to ship long distances. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

### **Black Seeded Simpson.**

Forms a close, compact mass of curly leaves of a yellowish green.

Pkt., 5c; oz., 15c; 1/4 lb., 30c; lb., \$1.00,

### Simpson's Early Curled.

A leading market variety used for very early planting and forcing. Forms a dense mass of finely curled and wrinkled leaves that are excellent and tender, and do not wilt readily.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

### Early Tennis Ball.

The plant is small, of rapid growth, and should be used as soon as large enough, as it quickly runs to seed. Leaves dark green, thick and crisp. One of the best for growing under cover, and for forcing. Pkt., 5c; oz., 15c; ½ lb., 30c; lb., \$1.00.

### White Paris Cos.

A distinct variety, forming oval, upright heads, largest near the top. It is hard, tender and crisp, and does not run to seed so quickly as other Cos. varieties.

### Pkt., 5c; oz., 15c; 1/4 lb., 30c; lb., \$1.00.

### Large Drumhead.

One of the largest heading kinds, but the heads are not so solid as the Hanson or Deacon. Pkt., 5c; oz., 15c; ½ lb., 30c; lb., \$1.00.

27



Rustless Rocky Ford

### PORTLAND SEED COMPANY'S

# **MUSKMELONS**

### Culture.

PLANT IN HILLS four to six feet apart each way, after danger of frost is past and ground is warm; enrich well with well-rotted manure and plant the seeds just under the surface, not too deep. One ounce to fifty hills; two to three pounds per acre.

Melons thrive best on warm, light soils, but good crops are obtained on heavy ground if it is rich and well drained; in cultivating, hill up by drawing the soil toward the plant. Use Bug Death, lime, slug shot or land plaster for destroying insects.

### **Burrell's Rustless Rocky Ford** Cantaloupe

#### See Cut

This new melon, the highest development of the Rocky Ford type has light green flesh which is very deep, rich and delicious, the quality being unsurpassed. It is solidly netted, thrifty, vigorous, rust resistant and a continuous bearer until frost. Ninetyfive per cent of the seed crop were choice, standard size melons.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

### **Emerald Gem.**

The superior quality of Emerald Gem makes it most desirable for home gardens. The flesh is very thick, of a dainty salmon color, and the flavor is the finest and sweetest of all melons. The skin is smooth and of a deep emerald green; rind thin; it bears early and is very prolific. Pkt., 5c; oz., 15c; ½ 1b., 35c; 1b., \$1.00.

### Small Green Nutmeg.

A variety ripening early. Flesh, green, fine and reet. Superior for the early market, or family rden, and a favorite for hotels and restaurants. sweet. garden, Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00.

### Osage, or Miller's Cream.

One of the finest flavored melons in cultivation, and highly recommended. The flesh is of a rich salmon color, very sweet and melting in quality. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00.

### Paul Rose, or Petoskey.

Created by a cross between the Netted Gem and Osage; fruit oval, about five inches in diameter, rich orange in color, sweet and highly flavored.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.

### Well-Known and Popular Varieties.

JENNY LIND. Extra early, flesh green, fine flavor EXTRA EARLY HACKENSACK. Flesh green, delicious, juicy and sweet	Pkt. 5c	Oz. <b>15c</b>	<sup>1</sup> ⁄ <sub>4</sub> lb. <b>35c</b>	Lb. <b>\$1.00</b>
EXTRA EARLY HACKENSACK. Flesh green, delicious, juicy and sweet medium size.	; 5c	15c	35c	1.00
LARGE YELLOW CANTALOUPE. Early and productive; flesh salmon color, rich, sweet.	1 5c	15c	35c	1.00

"DIAMOND" FERTILIZERS are an investment. not an expense, and will repay many times their cost.-Ask for Free Booklet.

### **Burrell Gem**

The Perfect Melon for Market or Home Gardens

Burrell's Gem has a tough, thin rind, well arched ribs, covered with a closely interlaced gray net-ting; shape elongated, being about 4 ½ inches in diameter by 6 inches long, flesh of a reddish orange, very thick, fine grained and spicy, seed held firmly in a triangular cavity. This is the secret of a good shipping melon. If the seeds shake loose easily a melon will quickly decay.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; lb., \$1.00.

### **Rocky Ford or Netted Gem.**

The most popular and best seller among Muskmelons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet and highly flavored. The fruit is wonderfully uniform in shape and quality. Grown largely in Colorado and shipped in carload lots all over the country. The favorite with market gardeners everywhere.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

#### Cassaba.

This is an excellent melon and much sought after. Large, rather oblong; well ribbed; skin thin, and of greenish yellow color; flesh two to three inches thick, delicious and melting. None better; matures late; keeps well. We offer two varieties, both excellent market

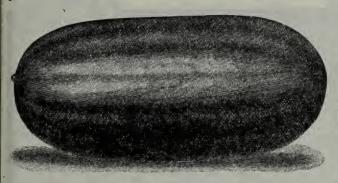
sorts, late keepers and good shippers. The Bldwell Winter is the largest type grown; has small seed cavity, is fine-grained and delicious.

The smaller round type is the Hubbard Winter, equally fine in every way. These are the choic strains, from one of California's best growers. These are the choicest Pkt., 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.



# WATERMELONS

CULTURE .-- Watermelons thrive best on light, well drained soils, but give good results on any good rich garden soil that is properly drained and cultivated. Plant after the weather is settled and ground warm. Hills should be eight feet apart each way and with well rotted manure thoroughly worked into each hill. One ounce of seed will plant thirty hills; two to three pounds per acre. Thin to two or three plants per hill.



### **Tom Watson**

This excellent new melon is of elongated form, averaging 18 to 24 inches in length, 10 to 12 inches in diameter, has a thin dark green rind and deep red flesh; crisp and sugary, with a lusciousness and distinctive flavor that makes it one of the finest melons ever produced; is hardy, early and stands handling and long shipment. We consider stands handling and long shipment. it a valuable market or home variety.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c.

### **Halbert Honey Watermelon**

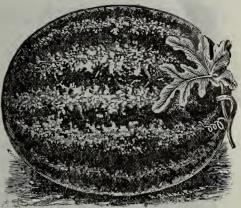
This superb Melon is a great improvement over the well-known Kleckley Sweets, as it fully equals it in delicious flavor and crispness, is more uniform in outline, darker in color, more vigorous and productive, and will ripen melons perfectly in The the cooler sections where other varieties fail. average length is eighteen to twenty inches, both ends being blunt and fully rounded out. The rich, dark glossy green, the thin rind and the bright crimson center make the new Halbert Honey the most attractive Watermelon.

Pkt., 5c; oz., 10c; 1/4 lb., 30c; lb., 85c.

### Kleckley's Sweet, or Monte Cristo.

A splendid sort for home use or near markets. Vine vigorous and productive; fruit of medium size; oval; color dark, mottled green in two shades, forming indistinct stripes. Flesh a beautiful bright rich red; exceedingly sweet and tender.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.



### Sweet Heart.

This melon has become very popular as a shipping melon. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and very light green; rind thin, but firm; flesh bright red, firm, solid, but very tender, melting and sweet. Fruit retains its good quality for a long time after ripening.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c.

### Cuban Queen.

A very fine variety, growing to a great size: flesh bright red, solid and sweet. The skin is beautifully striped dark and light green. Melons are wonderfully solid; rind thin. They are enormously productive and ripen early. Pkt., 5c; oz., 10c; ½ lb., 25c; lb., 60c.

### Ice Cream, or Peerless.

A grand favorite and standard variety. Superior Has beautiful crimson core, in every respect. which is always fine grained; can not be surpassed in flavor; very prolific.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c.

### Fordhook Early.

A fine extra early melon. Fruit of good size; skin dark green; flesh bright and crisp, sweet and good quality; rind thin, but tough. Good shipper. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c.

### Well-Known and Standard Varieties

	Pkt.	Oz.	¼ lb.	Lb.
DARK ICING. Early, round, solid, with thin dark green skin; of superb quality.	5c	10c	25c	60c
GRAY MONARCH, or Long White Icing. Very large; long; crimson flesh	5c	10c	20c	60c
FLORIDA FAVORITE. Large and long; rind firm; flesh deep red	5c	10c	20c	60 c
KENTUCKY WONDER. Oblong; flesh scarlet, crisp, tender, rich	5c	10c	20c	60 c
PHINNEY'S EARLY. Early, hardy; flesh pink; very sweet, tender and crisp	5c	10c	20c	60c
GYPSY, or Georgia Rattlesnake. Oblong, dark and striped; bright red flesh.	5c	10c	20c	60c
CITRON. (Red or Green Seeded). Round and handsome; for preserving only	5c	10c	25c	75c

DIAMOND No. 10 The Best for MELONS Ask for free book "Fertilizer for MELONS "FERTILIZERS"



We are large growers of Onion Seeds and Sets, and for years have been specializing on varieties that attain their greatest perfection in the Northwest and believe in our "OREGON YELLOW DANVERS" we have the finest type of Danver Onion ever offered, and recommend it to all commercial growers.

CULTURE.— The Onion thrives best in a rather deep, rich, loamy soil, and unlike most vegetables succeeds well when cultivated on the same ground for successive years. The best culture requires that the ground should be deeply dug and heavily manured with well rotted manure a season or two previously

# Portland Seed Co.'s Oregon Yellow Danvers

SEE COLOR PLATE. PAGE 18

This is the variety generally planted in the Northwest. The largest crops of onions and the best keepers, bringing the highest prices on the Pacific Coast markets are the Oregon Yellow Danvers. The bulbs are uniformly large, of a half-globe in shape, with small necks, and as a market or table onion can not be excelled.

Our seed is grown specially for us by the best onion seed growers in Oregon. No onion grower can, afford to plant anything inferior when such seed can be obtained. **Pkt., 5c; oz., 20c;** ¼ **lb., 60c; lb., \$2.00.** Sow as soon as ground can be prepared in the Spring. Give clean culture. An ounce of seed should drill 150 feet—3 to 4 lbs: per acre. If you contemplate a large planting, write us.

### Ailsa Craig

This fine new onion comes to us from the English growers and has won in their shows for years over all varieties; for either early or late sowing it has no equal. For best results it should be started inside early and transplanted. This treatment gives wonderful results in size and yield; 800 to 1000 bushels per acre can be grown in this way.

AILSA CRAIG is large, globe shape, straw colored, having no rival in form, size or weight. The quality is superb, being mild, crisp and de-licious. The attractive appearance, delicate flavor and large size always make Ailsa Craig in great Pkt., 10c; oz., 25c; ¼ lb., 75c. demand.

### Australian Brown

This onion resembles the Oregon Yellow Danvers in general appearance, but has a clear, amber-brown skin that attracts buyers. It matures early, ripens uniformly, and will keep in good condition longer than any other onion. We offer the true seed, Oregon grown.

Pkt., 5c; oz., 10c; ¼ lb., 30c, lb., 90c.

# Yellow Globe Danvers

A very handsome, round or globe-shaped variety of large size, with thin, yellowish skin, white flesh, fine grained, mild, very firm, and the best of keepers. It ripens early

Pkt., 5c; oz., 15c; 1/4 1b., 40c; lb., \$1.35.

# Large Red Wethersfield

A standard variety: one of the most productive kinds, even in poor soil. Its good keeping qualities render it one of the best for shipping.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00.

### Prizetaker-The Genuine

# The Handsomest and Largest Yellow Globe Onion.

Of fine flavor, handsome shape and enormous size. A perfect globe shape, with a bright strawcolored skin; the necks are very small and the onions always ripen up hard.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

# **ONIONS**—Continued

# White "Bunching" Onion

This variety is especially useful to market gar-deners for producing an attractive "green onion." The young stalks blanch to a beautiful clear white and are crisp and mild, attaining a good size before the bulb forms.

Pkt., 5c; oz., 20c; 1/4 lb., 50c; per lb., \$1.50.

# White Bermuda

A beautiful market variety for fancy trade; color a delicate pinkish straw; flavor very mild. The finest strains come to us from **Teneriffe**— **Canary** Islands.

White Bermuda matures in less than six months from the time of sowing, and we believe it to be a valuable early onion for our Coast growers. Try it. **Pkt., 5c; oz., 25c;** ¼ **lb., 75c; lb., \$2.60.** 

### Red Bermuda

Identical with the White except in color, which is a pale, translucent red. This is the ideal early onion wherever the red variety is preferred.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.60.

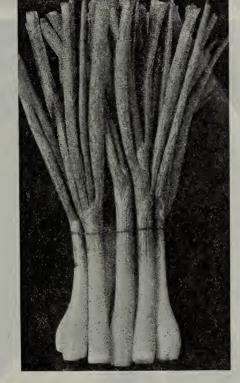
### **Crystal Wax**

A pure white, extremely early, flat onion of the Bermuda type; very sweet and delicious and We so clear and waxy that it appears translucent. offer the true stock, importing the seed direct from the Canary Islands. Pkt., 5c; oz., 40c; ¼ lb., \$1.25.

### Extra Early Red Flat

A medium-sized, flat variety; comes into use nearly two weeks earlier than the Large Red Wethersfield.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.



### WHITE BUNCHING

### White Portugal or Silver Skin

Skin and flesh pure white; mild flavor and flat shape; grown largely for sets. Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$1.90.

### Well-Known and Popular Onions

	Pkt.	Oz.	¼lb.	Lb.
YELLOW FLAT DANVERS. Largely planted. Flesh fine grained; mild; white;			•-	
good keeper		15c	35c	\$1.15
<b>EXTRA EARLY BARLETTA.</b> A small, pure white, mild onion; fine for pickles		20c	50c	1.50
WHITE GLOBE. Flesh very white, fine, rich and sweet; fine keeper		20c	60c	1.90
GIANT ROCCA. Large, globe-shaped; skin reddish-brown; flesh mild, sweet				
flavored		20c	50c	1.75
MAMMOTH SILVER KING. Very large and attractive; skin white; flesh		-		_
fine grained and mild.	5c	20c	50c	1.75
QUEEN. If sown thickly, produces small, very firm bulbs, the best of all for		-		
pickling; if given more room, matures an excellent onion, that will keep				
all Winter	5c	20c	50c	1.50
Onion Sata D. I.D.: D. 11				

### **Onion Sets**—Pound Prices Postpaid

### **Bottom Onion Sets.**

Small onions grown from seed that has been sown too thickly to attain a large size. The small onions (about  $\frac{1}{2}$  inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table or bunched for the market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown directly from the seed. Per lb., 25c.

For Garlic see page 17.

Produced in clusters.

Per 1b., 25c.

### Shallots.

Top Sets.

Valuable for bunching or for an early crop. The smallest sets make fine bulbs of good size, while the larger ones produce a cluster of small to medium-sized bulbs. Light brown skin; mild, white flesh. Per lb., 30c.

> **Bottom Multiplier** Per lb., 30c.

Potato onion sets.

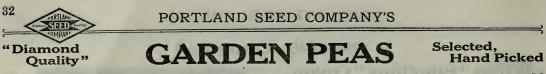
# Okra or Gumbo White Velvet.

### Improved Dwarf Green.

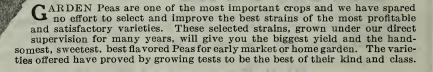
Very early, with long, green, slender pods. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c.

The pods are smooth or very slightly ribbed, large; remain tender a long time. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c.

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Add 10c. per lb. postage for Peas by mail—except 10c. pkts, which are postpald



# **Extra Early Peas**

# Unique

### Our New Extra Early Dwarf Pea

Quality and sweetness unsurpassed; yields enormously; has largest and longest pods of any Extra Early Dwarf Pea, and they are filled clear to the ends with rich, fine flavored Peas, as sweet as sugar.

Vines are only eight to ten inches high, and peas are ready for table in sixty days from date of planting. Mature evenly, and are all gone in less than ten days — a very valuable point for market gardeners.

"Unique" is hardy, vigorous and the best early dwarf garden Pea ever grown. We urge our cus-tomers to give it a trial. Pkt., 15c; lb., 25c.

### Little Marvel

# A Splendid New Dwarf Pea for Home or Market

The dwarf, bushy vines averaging 15 inches are loaded with firm, square-ended pods 2½ to 3 inches long, tightly filled with plump, luscious, deep green peas. Little Marvel is as early as American Wonder, fully equals the superb quality of Nott's Excelsior and far outyields these two popular sorts. Pkt. 10c; lb., 25c; 10 lbs., \$2.25.

It's Easy to Inoculate Peas and Beans with

# P. S. Co.'s New First Early

For Fall or earliest Spring planting. The first early round Pea with the sweet flavor of the wrinkled varieties.

"First Early" resembles "Alaska" in habit of growth, the height being 24 to 30 inches, without branching.

Pods are produced in great abundance, are very uniform, and contain six peas; mature very quickly and evenly, giving about three pickings, and for extreme earliness and productiveness far outclasses Alaska. "First Early" is the best early pea for Fall planting, or for early succession. Our grower reports: "It fairly jumps out of the ground." Planted the same time as "American Wonder," is ready for table three weeks earlier. Pkt., 15c; lb., 25c.

### Alaska or Earliest of All The Standard Extra Early Variety

A smooth, blue pea, of even, vigorous, growth and extra early maturity. Vines two to three feet high, unbranched, bearing four to seven long pods, which are filled with medium-sized, bright green peas of excellent flavor. A great favorite with our market gardeners for Fall or early Spring planting. Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

FARMOGERM-Increases the Yield-Improves the Quality Builds Up Your Soil - SEE PAGE 51.

## PEAS-Continued

Early Garden Peas-Standard Varieties

Add 10c per lb. postage for peas py mail-except 10c pkts., which are postpaid

## **Edward VII**

#### The pods are well filled and as large as most late peas

We introduced this grand variety from Europe and its popularity increases each season. Of all the Dwarf Early Peas King Edward VII produces the largest pods of the finest flavored peas in the greatest quantities.

Pods resemble Stratagem in color and size and are remarkably well filled with deliciously flavored peas. Height, 15 inches. Try this grand new pea and we are sure you will be more than pleased. **Pkt.**, 10c; 1b., 20c; 10 lbs., \$1.50.

# Portland Seed Co.'s Magnificent

We like "Magnificent" better every year. It is just what the name implies, a magnificent pea. A robust grower, producing in astounding profusion large, handsome, deep green pods, closely packed with luscious, tender, sweet peas. A grand medium early pea for home and market garden; bears through a long season. Height, two feet. You will not be disappointed in this new variety. Pkt., 10c; 1b., 20c; 10 lbs., \$1.50.

## Laxtonian

A new, early, dwarf, robust, large podded pea of superior excellence; often re-ferred to as "Dwarf Gradus," and is said to surpass Gradus in yield and quality, with the added advantage of dwarfer growth, averaging 16 inches. The large pods are well filled, holding 8 to 10 peas.

Laxtonian is so highly recommended that you should give it a trial.

Pkt., 10c; lb., 25c; 10 lbs., \$2.25.

#### American Wonder

One of the most popular and best of the early wrinkled sorts. A great favorite for family use. Has stout, branching vines, covered with well-filled pods contain-ing seven or eight large, exceedingly sweet, tender and well-flavored peas. Height Pkt., 10c; lb., 15c; 10 lbs., \$1.25. 10 to 12 inches.

#### Gradus

This extra early, wrinkled pea bears pods of large size and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth, vigorous and healthy; vines 2 1/2 feet in height; very prolific. The quality and flavor are delicious and the peas remain tender and sweet for a long time. Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

Nott's Excelsior

The most desirable sort for the market gardener, and unexcelled for the home garden. Very hardy. The pols contain from six to nine large peas, which are unusu-ally fine flavored and tender. **Pkt., 10c; lb., 15c; 10 lbs., \$1.25**.

#### Premium Gem

One of the earliest dwarf varieties, coming in a little later than the American Wonder; grows taller, much more productive and continues in bearing The quality of the pea is very superior. longer. Height, 15 inches. Pkt., 10c; lb. 15c; 10 lbs., \$1.15.

William Hurst

A splendid English variety of special merit, grows to a height of 18 inches is very early and bears the shapely, well filled pods in great abundance. A vigorous grower and one of the very best Garden Peas for home or market use.

Pkt., 10c; lb., 15c; 10 lbs., \$1.00.

## **Main Crop Varieties**

#### **Improved Stratagem**

One of the best of the large podded peas; the pods are of immense size filled with large, dark green, wrinkled peas of the finest quality; vine of medium height, but very stocky, with very broad, light green leaves, and bearing an abundance of large, handsome pods.

Pkt., 10c; lb., 15c; 10 lbs., \$1.15.

#### **Yorkshire Hero**

One of the largest, sweet, wrinkled kinds; vines strong and spreading; pods of good size and well filled; much in use, and has enjoyed a long popularte; bears a long time; height,  $2\frac{1}{2}$ Pkt., 10c; lb., 15c; 10 lbs., \$1.10. ity; medium late; feet.

#### **Telephone**—Tall

A Great Favorite With Our Market Gardeners.

Immensely productive, of the finest quality and excellent, sugary flavor; vines strong; the pods are of large size, filled with large, luscious peas; height four feet. Pkt., 10c; lb., 20c; 10 lbs., \$1.50. **Improved Dwarf Telephone** 

#### **Our Own Select Strain.**

Dwarf Telephone is the famous old Telephone without its long vines; of healthy, stocky growth; very productive; pods large, broad, straight and remarkably well filled with large, sweet peas of delicious flavor; very desirable. Eighteen to twenty inches high. **Pkt.**, 10c; 1b., 20c; 10 lbs., \$1.85.

#### Sugar Peas---Edible Pods

These peas have broad, fleshy pods that are broken and cooked like string beans. They are sweet and tender and of a luscious flavor; served with butter sauce.

#### **Dwarf Gray**

Pods large, sweet and tender; vines dwarf; gray Pkt., 10c; lb., 25c. seeded.



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A "Planet Jr." Makes Gardening Easy.

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PORTLAND SEED COMPANY'S

# PARSNIPS

THE Parsnip is nutritious and wholesome, with a sugary sweetness peculiar to itself, and is desirable both for the table and stock feeding. It yields a large crop, and is said to be more val-S Ervis uable for dairy cows than either the carrot or turnip. As



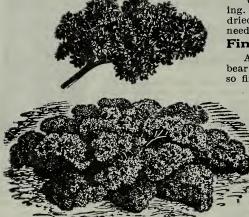
the seed germinates very slowly, sow as early in Spring as possible, in drills fifteen inches apart on deeply cultivated, rich, loamy soil. Keep clear of weeds and thin to three or four inches apart. The roots of the parsnip are improved by freezing.

#### Hollow Crown or Long White Dutch

Root very long, white, smooth, tender, sug-y, and of most excellent flavor. Very hardy; ary, and of most excellent flavor. Very hardy; will keep through the Winter without protection. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Guernsey. Half Long Root white, very tender, with a smooth, clear skin. Shorter and thicker than "Hollow Crown" desirable for stiff soils.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 50c.



## Parsley

Very useful for flavoring soups, meats and for garnish-The green leaves are used for flavoring or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

#### Fine Triple-Curled, or Myatt's Garnishing.

A fine, free growing, but not large variety. The plants bear a great number of leaves, which are so abundant and so finely curled that they resemble a bunch of moss.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

#### Turnip-Rooted, or Hamburg.

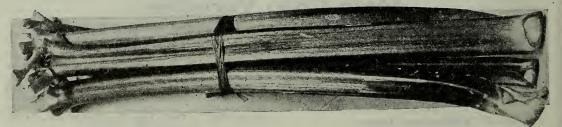
The root, which resembles a small turnip, is the edible portion of this variety. Extensively grown and used for flavoring soups, etc.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

#### **Champion Moss Curled.**

A compact growing, finely cut and much curled variety of a bright green color. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

**Rhubarb** or Pie Plant



CULTURE.-- Rhubarb succeeds best in deep, rich, somewhat retentive soil. The richer its condition and the deeper it is stirred the better. Sow in drills an inch deep and thin out the plants to six inches apart. In the Fall transplant the young plants into very highly manured and deeply stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure each Spring. The stalks should not be plucked until the second year and the plant never allowed to exhaust itself by running to seed.

#### Victoria, or Mammoth

A large early variety, very tender and of fine Pkt., 5c; oz., 15c; 14 lb., 40c; lb., \$1.25.

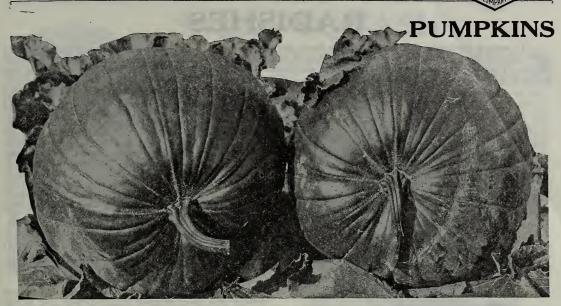
Very large; finest cooking variety. Pkt., 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

Rhubarb Roots.— From October to June we can always supply one or two-year old Rhubarb Roots. Customers wanting only a few dozen roots for home gardens will save much valuable time by ordering roots instead of seed. For prices, see Plant Department.

flavor.

#### **Giant Linnaeus**

#### COMPLETE SEED ANNUAL



CULTURE .-- Pumpkins will grow on any good farm land, but their size and quality will depend on the culture and fertility of the soil. Plant early in May, in hills six to eight feet apart. One pound of seed will plant about 300 hills. Care should be taken to keep the different varieties well apart, also away from other vining plants, as they mix and deteriorate very rapidly.

#### Winter Luxury.

The best flavored pie pumpkin grown; enormously productive; excellent keeper; medium size; color, golden-russet, finely netted; flesh, deep golden, sweet, tender and very thick; none better. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 65c.

#### Sweet, or Sugar.

A handsome and productive small pumpkin, ten to twelve inches in diameter; round flattened; skin, orange; flesh, deep yellow, fine grained and very sweet. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

#### **Tennessee Sweet Potato.**

Pear shaped; flesh thick, cream white, fine grained and of excellent flavor.

## Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 65c.

#### Large Yellow, or Connecticut Field.

Large, round; deep, glossy yellow. Vines vigorous and very productive; good keeper. Grown extensively for stock feeding.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 50c.

#### **Giant of All**

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#### "King of Mammoths."

This colossal Pumpkin is almost a globe in shape The skin is of a beautiful, rich golden yellow; flesh firm, fine grained and deep yellow, sweet flavored, very thick and of excellent quality for so mammoth a variety. These Pumpkins attain an enormous size and will carry away prizes at your county fairs.

Large pkt., 10c; oz., 15c; 1/4 lb., 40c; lb., \$1.50.

#### Mammoth Tours.

A productive French variety; grows to an enor-mous size. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

#### Large Sweet Cheese

A popular variety. Fruit flattened; skin mottled light green and yellow. Flesh, yellow, thick, tender; very nutritious and of excellent quality; Flesh, yellow, thick, a most productive variety.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

## PEPPER

Sow the seeds early in hotbeds; or later, when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield.

NEW NOCERA.— A Giant Red Pepper of largest size; mild and very fleshy; a favorite English variety.

Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

NEW CHINESE GIANT SWEET.— The largest and best of the mild Red Peppers. The fruits are four to five inches in diameter, borne in clusters on the thick, stocky bushes, that are well branched, and grow about two feet high; color, brilliant, deep red; vigorous and about as early as Ruby King. Pkt., 10c; 1/2 oz., 25c; oz., 40c; 1/4 lb., \$1.25.

	Pkt.	Oz.	1/4 lb.	
RUBY KING. Very large, sweet and mild; bright scarlet	. 5c	25c	75c	and the second of the
LARGE BELL, or BULL NOSE. Large, mild, thick flesher variety. One of the best for stuffed pickles		25c	75c	1000
GOLDEN DAWN. Bright, golden yellow; very productive entirely free from fiery flavor	. 5c	25c	75c	
SWEET SPANISH, or MOUNTAIN. Of the largest size, brigh scarlet. Excellent for pickling and stuffing	. 5c	25c	75c	
CAYENNE. Pods long; bright red; very pungent and used ver largely with pickles when green	. 5c	25c	75c	
CHILI. Pods small and pointed; brilliant scarlet; very pungen when ripe.		25c	75c	

# RADISHES

To secure Radishes with crisp, tender flesh, grow them quickly in rich, loose soil, and gather before reaching full size. Our Radish Seed is strictly of the finest grade, being grown from carefully selected roots. Frequent planting should be made for succession, so that a supply of fresh, tender Radishes in the finest condition may be had at all times.

#### CRIMSON GIANT

#### White Icicle

This superb Radish is the finest and longest of the very early, pure white varieties. Planted in the Spring, is ready for use in twenty to twentyfive days; their long, slender form and pure, paperwhite skin are most attractive when bunched for when young, but also retains these qualities until the roots attain large size; is excellently adapted for forcing purposes or successive sowing in the open ground and gives a continuous supply of tender, crisp Radishes for the table or market throughout the season.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

#### Winter Radishes

#### California Mammoth White China.

This is the largest of all radishes. Roots grow ten to twelve inches long and are solid, tender and crisp. Keeps well through Winter.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

#### China Rose Winter.

One of the best Fall and Winter varieties; a favorite with market gardeners; bright rose color; flesh white, firm and of superior quality.

Pkt., 5c; oz., 10c; ½ Ib., 20c; Ib., 65c. BLACK SPANISH LONG.— Standard Winter sort; has good flavor and keeps well.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c. BLACK SPANISH ROUND.— Same as long, except shape. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

#### Early Crimson Giant.

## The Largest Early Scarlet Turnip-Shaped Radish.

A new, early Radish, double the size of any of the turnip-shaped type, but, notwithstanding its immense size, **does not get hollow and pithy**. The flesh is a sparkling **white**, **solid**, **crisp**, **juicy** and of the **mildest flavor**. The shape of the bulb varies from round to almost oval, but the bright, deep crimson color of the skin remains quite constant. Excellent for both forcing and open ground. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

#### **Early Scarlet Turnip**

A small, round, red turnip-shaped Radish, with small top and of very quick growth; very early; rich color and crisp, tender flesh.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c;

#### **Cincinnati Market**

A superior strain of long scarlet, an early, rapid grower of a deep crimson color so clear and brittle as to be almost transparent. Keeps fresh and stands shipment — a fine market radish.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

#### French Breakfast, or Half Long.

Medium size, quick growth, crisp and tender; lower end and taproot white. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

#### Early Scarlet Turnip, White Tipped

A beautiful variety; deep scarlet with white tip. Very early. Has a small top, and may be planted closely. Flesh crisp, tender and sweet. Cannot fail to give satisfaction as a forcing Radish. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 55c.

#### Early Long Scarlet, Short Top.

This bright scarlet, small topped sort is uniformly straight, smooth, brittle and crisp, and is a standard and excellent sort for private gardens or market use. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c.

#### Long Brightest Scarlet, White Tipped

This is the brightest and handsomest colored Scarlet Radish known. The lower third of the root is snow white; very attractive. It is extra early and the flesh is very tender. Valuable for forcing or open ground. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c.

#### Improved Chartier.

Roots long, tapering, and attaining a very large size. Of rapid growth; remains crisp and tender till fully grown. Color, scarlet above, shading into fully grown. Color, scarlet above, shading into white at the tip. Flesh white and mild flavored. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c.

#### Early Snowball.

A grand improvement on the White Box or White Turnip Radish which has been so popular for several years. It is handsome in shape, very early, and has but few leaves, is of a clear white color, solid, juicy, crisp, tender and unsurpassed in flavor. A good sort for forcing. Pkt., 5c; oz., 10c; ½ lb., 20c; lb., 65.

#### Lady Finger, or White Vienna

Of rapid growth and beautiful shape. Skin and flesh snow-white; very juicy, firm, crisp an tender; the finest of Long White Radishes.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

#### White Strasburg.

One of the best large Summer sorts. It covers a long season, as it is good when quite small. The roots are long, very white, crisp and tender. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

#### COMPLETE SEED ANNUAL



#### "Diamond **Ouality**"

CULTURE. — The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same

SOUASH

as those given for cucumbers and melons, but squash is less particular as to soil. The Summer varieties should be plant-

ed four to six feet apart each way, and Winter sorts the eight to ten feet. Three plants are sufficient to a hill.

DIAMOND No. 4 **Best Fert** for Squash

## **Summer Varieties**

#### Mammoth White Bush Scallop.

The best Summer sort for the market; very pro-ductive and of good size.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 65c. Early Yellow Mammoth Bush Scallop

An early, flat, scallop-shaped variety; color yel-low; flesh pale yellow and well flavored; very productive. Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 65c.

#### Mammoth Summer Crookneck.

Early, prolific, solid, curved neck; skin yellow, thin, hard and warty; flesh tender and of good qual-ity. Twice as large as the ordinary Crookneck and ity. several days earlier.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 70c.

#### True Hubbard.

The best seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Keeps perfectly through the Win-ter. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

#### New Delicious.

This new Fall and Winter squash resembles the old Hubbard; average weight is between five and ten pounds. Seed cavity small; flesh exceedingly thick, compact, fine grained; color, golden orange. The flesh is meaty, granulated, tender and almost of mealy dryness, cooking sweet and rich, whether steamed, baked, boiled or made into pies. Pkt., 5c; oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 25c; lb., 85c.

#### **Boston Marrow.**

Skin yellowish, very thin; flesh dry and fine grained; of unsurpassed flavor.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

#### Sibley, or Pike's Peak.

Shell smooth, thin and of a pale green color: the flesh is thick, solid, deep orange color; very dry, fine grained with a delicate flavor.

Pkt., 5c; oz., 10c; 1/4 lb., 30c; lb., 90c.

#### Mammoth Chili.

The largest of all Squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all Its size makes it valuable for stock feedpurposes. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c. ing.

White Summer Crookneck. Similar to the Yellow Crookneck, but of a beau-

tiful ivory white and unsurpassed quality Pkt., 5c; oz., 10c; ½ Ib., 25c; Ib., 70c.

## English Vegetable Marrow.

Oblong, dull yellow skin, very prolific and of finest table quality. Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 65c.

Fordhook.

Oblong in shape, eight to ten inches long, with thin, yellowish skin, slightly ridged. One of the finest Summer Squashes, and if left to ripen makes a splendid Winter sort.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 70c.

## Winter Varieties

#### Golden Hubbard

The same in size, shape and quality as the wellknown Hubbard Squash, except that it is a bright red or golden color, and somewhat earlier. It is also a long keeper. One of the very best Fall and Winter sorts yet introduced. Maturing before the frosts; is vigorous and wonderfully productive.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

Profitable Squash for market gardeners 90 per cent Salable.

NEW DELICIOUS

REMEMBER-"PRIDE OF MULTNOMAH" MAIN CROP POTATO FOR IS THE MOST PROFITABLE YOU TO GROW.

#### PORTLAND SEED COMPANY'S

TOMATOES

THE NEWER types of hardy, prolific Tomatoes are better adapted to the cool Coast climate than the older sorts; and splendid crops are now being grown where heretofore it was thought Tomatoes would not thrive. A good plan is to try several varieties and find which is best suited to your special conditions.

> **CULTURE.**— Sow early in hotbeds, and as soon as they have four leaves transplant into shallow boxes. Harden off, and set out as soon as danger of frost is past. An ounce of seed will produce 3,000 to 4,000 plants.

Chalk's Early Jewel See Color Plate, Page 17 Large, bright red, smooth, round fruits,

very deep and colored evenly up to the stem; very solid, almost seedless and of the finest flavor.

Vines are vigorous, not subject to blight, and yield fully

equal to, or better than, Earliana. We recommend Chalk's Early Jewel as the very best early Tomato for either market or home gardens. Pkt., 10c; oz., 20c; 1/4 lb., 60c.

> Spark's Earliana. The Earliest Tomato.

Of large, uniform size and beautiful red color. Ripens thoroughly all over, the stem end coloring up perfectly. Almost seedless and very solid. A most vigorous grower and heavy bearer, continuing until frost. Succeeds everywhere, and especially recommended for this Coast.

Spark's Earliana is as near seedless as any tomato, giving but 12 to 15 pounds of seed to the acre. For this reason the genuine seed can never be sold at a low price. Pkt., 10c; oz., 15c; ¼ lb., 50c.

**New-Carter's Sunrise** 

A very early English variety of fine flavor and healthy, vigorous growth with solid flesh and few seeds; very even, smooth and shapely. Color, bright, rich scarlet. Is also one of the best forcing varieties. Pkt., 25c.

#### Livingston Globe One of the Best Early Tomatoes. Hardy and Blight Proof.

Fruits are of large, even size; very early; ripen clear through and are always smooth, firm and round; with solid meat and few seeds. Color is a beautiful glossy, rose-tinged purple; very product-ive. Livingston's Globe is of delicious table quality and will keep longer than any other Tomato. Is also an excellent forcing variety. Pkt., 10c; oz., 25c; ¼ lb., 75c.

#### Livingston's New Coreless.

The most perfect shape canning variety ever produced. Large size, globe shaped, full at stem

end, bright red, a strong grower and big cropper. It is immensely productive, clusters of four to seven fruits are produced at six to eight inches apart along the stem. All of the fruits are of marketable size, and many of them are quite large, twelve to fifteen ounces. Always free from green core; ripens all over and through and right up under the stem, all at once. A grand, good slicing variety; the seed cells being surrounded by bright red, heavy, meaty and delicious flesh, which is slightly acid.

Pkt., 10c; oz., 30c; 1/4 lb., 95c.

Ponderosa

The largest Tomato, fruits are solid and of a purplish red color, sweet and of good quality. Pkt., 10c; oz., 40c; ¼ lb., \$1.00; lb., \$3.00.

#### New Stone.

This new variety has obtained great popularity with canners, growers and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color a desirable red. In shape, perfectly smooth and thicker from stem to blocker and the most particle making it to problossom end than most varieties, making it very handsome and salable. All speak in highest terms of its beautiful color, its wonderful yielding properties, its unequalled firmness.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

#### Comet-Forcing.

The very best forcing variety and a general fa-vorite with greenhouse growers. Color is a beautiful scarlet; fruits are of good size, very smooth and uniform. We offer a select strain from inside stock. Pkt., 25c.

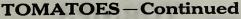
#### Fordhook First.

A splendid variety, especially adapted for cool, moist or heavy soils. Plants of strong, running growth; fruit, three inches in diameter, perfectly smooth and free from cracks; quite thick through and richly colored deep pink. Very fleshy and of the finest flavor. Produces smooth, solid, handsome fruit of superior quality, earlier than most other earlier sorts.

Pkt., 5c; oz., 15c; 1/4 lb., 50c.

Tomato Plants STANDARD VARIETIES FOR SEASONABLE DELIVERY – FINE, HEALTHY, TRANSPLANTED AND POT GROWN PLANTS—Safely Packed and Shipped to Any Point in the Northwest. See Plant Dept.

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#### **Atlantic Prize.**

In point of earliness, this undoubtedly takes the lead. In size, shape and color it compares favorably with later sorts. Color, bright red. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Quarter Century. A grand, new dwarf tomato. The fruit is large and heavy and of superior flavor; color, deep red. Fine for home garden.

Pkt., 5c; oz., 25c; 1/4 lb., 85c.

Livingston's Perfection.

One of the best medium early, round, uniformly smooth; vines very productive; fruit deep scarlet, firm and of excellent quality. Vines continue long in bearing. Pkt., 5c; oz., 20c; 1/4 lb., 55c.

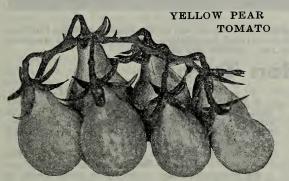
#### **Early Michigan**

An extremely smooth and perfectly shaped to-mato; very early; vines strong and vigorous. Pkt., 5c; oz., 15c; 1/4 lb., 50c.

> ¼lb. \$0.50 . 75 .75 . 55 . 55

Well Known Standard Varieties.

	Pkt.	Oz.
ACME. The well known, standard, bright pink Tomato	5c	15c
<b>DWARF CHAMPION.</b> Dwarf, upright growth; smooth,		
purple fruit.	5C	25c
GOLDEN OUEEN. This is a first-class, large, smooth,		
pure vellow tomato.	5C	25c
LIVINGSTON'S BEAUTY. Large; good quality; deep		
red in color	5C	20c
LIVINGSTON'S FAVORITE. Excellent for general crop;		
bears heavily	ac	20 c



#### Yellow Pear.

A small pear-shaped tomato, borne in great pro-fusion, vine literally covered with large clusters of fine, solid fruits; excellent for preserving, and for use in salads and cooking is superior, as flesh is not watery. Very hardy. To this class belong Yellow Plum and Red Cherry. All same price.

Pkt., 5c; oz., 25c; ¼ lb., 75c.

FERTILIZERS

Are not an expense. They are a safe investment, sure to return many times their cost. Our Fertilizer Book and the Books of the German Kali Works

Free on request.

#### Ground Cherry, or Husk Tomato.

Grows to great perfection under ordinary culture, yielding abundantly; very much prized for preserving; should be in every garden. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

Tomato Culture—by Littooy Post Paid 25c.

l'obacco

Sow the seed thinly in beds, as early as they can be well prepared. Cultivate thoroughly, transplanting when six inches high to rows four feet apart each way.

**Connecticut Seed Leaf.** 

Hardy, and the best adapted to cool localities, and for general use. Pkt., 5c; oz., 20c; 2 oz., 35c; ¼ lb., 60c; lb., \$2.00.

Havana.

Of fine texture and delicate flavor. Pkt., 5c; oz., 25c; ¼ lb., 75c.

**Tree Seed**-for Nurserymen

Growers wanting large quantities should give us their orders early. Prices quoted on request. Single pound prices are by mail. postpaid.

A	pple Seed.
French Crab.	Oz., 10c; ¼ lb., 20c; lb., 60c.
С	herry Pits.
Mazzard.	1/4 lb., 15c; 1 lb., 50c.
Mahaleb. O	)z., 10c; ¼ lb., 25c; lb., 80c.
P	each Pits.
For Nurserv Sto	ock. L.h., 20c 100 lbs. \$2.25

Quince Seed.

Oz., 20c; 1/4 lb., 60c; lb., \$2.10. Locust.

 
 Wellow or Black.
 Oz., 10c; ¼ lb., 20c; lb., 60c.

 Honey.
 Oz., 10c; ¼ lb., 25c.
 Honey.

French. Japanese. stocks.

The best imported for nursery Oz., 30c; 1/4 lb., 70c; lb., \$2.35. Walnut, English

Imported and Domestic We offer new crop, our own direct importation from the best French growers; also Oregon grown from grafted stock. In the three most desirable varieties: Mayette, Franquette, and Praeparturian. Write for prices on large orders.

Pear Seed.

2c each; \$1.50 per 100 nuts.

Oz., 15c; ¼ lb., 50c; lb., \$1.60.

"Diamond Quality" Nursery Stocks are Vigorous, Healthy and True to Name. Ask for our 64-page Catalog.

GROUND CHERRY

> or HUSK

TOMATO

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#### PURPLE TOP WHITE GLOBE

OR early use sow the small sorts as soon as the ground can be worked in the Spring, in drills fourteen inches apart. As the seed is very fine, it should be covered but slightly, except in very dry weather. For Fall and Winter use, sow the early kinds during July, August and September.

## Early Garden Turnips

#### Early Purple Top Milan.

This variety is ready for the table sooner after planting than any other yet introduced. Top small, erect, strap-leaved; bulb a deep purple above, white

underneath; flesh white, firm and delicate. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

#### Early White Milan. SIID

Same as Purple Top Milan, but pure white. sweet and tender; best early market variety. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

#### Early White Flat Dutch.

One of the very best and most universally grown. Small, erect top, round, flat; flesh, white, firm, but very tender and sweet. Of quick growth, it is soon ready for the table and keeps well.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

#### **Danish Bortfelder**

This is a superior Danish variety introduced as an improvement on Cow Horn, being a heavier yielder and growing straight. It is also sweet and fine-grained, being a good table Turnip. Shape is long and tapering, but grows well up out of the sround. Sow in Spring for Summer, and in mid-Summer for Winter feeding.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

#### White Egg.

Is perfectly smooth, of a pure, clear white, growing half out of the ground, and at times to the size of a Ruta Baga, being a very choice kind for table use; of excellent flavor, sweet and mild. Pulls clean from the ground; thin, snow-white skin.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

#### **Pomeranian White Globe.**

One of the most productive kinds, and in good, rich soil, roots will frequently grow to 12 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth.

Pkt., 5c; ez., 10c; ¼ lb., 20c; lb., 60c.

#### Purple Top Strap Leaf.

A leading white-fleshed variety, and one of the best, either for the family, market garden or field It is medium size, and produces a large crop. crop. The flesh is firm, but tender, and of a superior rich

# Pkt., 5c; oz., 10c; 2 oz., 15c; ½ lb., 20c; lb., 50c. Early Snowball.

Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp, solid and of fine flavor. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Orange Jelly. Or Robertson's Golden Ball. Undoubtedly one of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

# Main Crop Turnips

#### **Purple Top White Globe.**

A large, globe-shaped variety; purple above the ound. It is handsome and of excellent quality, ground. and recommended both for the family garden and field crop. (See cut). Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

## Large White Norfolk.

A white variety, usually attaining a very large size. Extensively grown for stock feeding. The leaves are also used for greens. It is hardy and may remain in the ground all Winter. Yields very large Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. crop.

#### Cowhorn.

Sometimes called Long White. Slightly crooked. Pure white except a little shade of green at the top. Grows half out of the ground and is of very rapid growth. Is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Oregon, as it is an immense yielder. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Yellow Aberdeen.

#### Round, medium size; light yellow. Produces a large crop; is hardy and keeps well; flesh very firm but tender and sweet. A great favorite with the dairymen.

Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 50c.

#### **TURNIPS**—Continued

## **Ruta Baga or Swede**

 $\mathbf{F}^{\mathrm{OR}}$  feeding stock in Fall and Winter there is nothing superior to Turnips or Ruta Bagas, as they are much liked by all kinds of stock and serve to keep them in good condition. We can not too earnestly recommend farmers to increase their sowings largely, for we are sure the crop will prove remunerative.

#### **Bangholm Pajbjerg**

**Improved Thick Leaved.** This variety was awarded a first-class certificate by the Danish government for heaviest yield, hav-ing given 49 tons per acre. In shape is a little more elongated than the Globe types. This variety is recommended as the best of its class.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

#### Monarch or Tankard.

This is a yellow fleshed sort, having very large, tankard-shaped roots; flesh very solid, fine grained. of fine flavor; grows well out of the ground and yields large crops. **Pkt.**, 5c; oz., 10c; ½ Ib., 20c; Ib., 50c.

Skirving's.

Enormously productive; flesh yellow, solid and sweet. One of the best for field culture.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 55c.

#### White Sweet Russian.

This variety is most excellent, either for table or stock. It grows to a very large size; flesh white, solid, of a firm texture, sweet and rich; an excellent keeper.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c. **Improved American Purple Top.** 

The leading standard variety, being very distinct in type, attaining a wonderfully large size; immense yielder. The flesh is very firm, superior a wonderfully large size, initiate purposes. in every way, valuable alike for all purposes. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c.

SPINACH

This is an important gardener's crop, of easy culture. Spinach



For Spring and Summer use, sow either broadcast or in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession.

> **Prices are Uniform on All Varieties** Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 30c.

Improved Thick Leaved. Variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color, and quality

when cooked. Best for market gardeners. Savoy Leaved. Very early; of upright growth; leaves pointed. Plant in the Autumn for Spring use; grows quickly.

Victoria. Leaves large, tender and of good quality; good market sort.

Prickly Winter. Hardiest variety; may be sown in the Fall; seed prickly; leaves long, pointed, thick and succulent.

Long Standing. An improved variety for general use; slow going to seed.

#### SALSIFY or Vegetable Oyster

Salsify is a nutritious and wholesome vegetable, having the appearance of a small parsnip; in flavor closely resembling oysters, for which it is, in that respect, a good substitute. It is rapidly coming into more general use. Sow early in Spring, in drills a foot apart, and when two or three inches high thin out to three or four inches. Its genera culture is the same as that recommended for car-rots. The roots are perfectly hardy and may remain in the ground during Winter, or may be stored in dry earth or sand.

Mammoth Sandwich Island. The leading variety; produces a large crop of straight, smooth roots. Pkt., 5c; oz., 10; ½ lb., 30c; lb., \$1.00.

BANGHOLM PAJBJERG

> Has Produced 49 Tons per Acre

Your Separator should be a SHARPLES

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PORTLAND SEED COMPANY'S

## Herb Seeds--Sweet, Pot and Medicinal

Every garden should contain a collection of Herbs for flavoring and medicinal purposes. They are almost a household necessity; are easily grown, and many of them are very ornamental.

**CULTURE.**— Herbs in general delight in rich, mellow soil. Those marked with an (\*) are perennial, and when once obtained in the garden may, with a little attention, be preserved for years. Sow the seeds early in the Spring in shallow drills, one foot apart. We offer some of the most useful and popular. They should be cut on a dry day, just before they come into full bloom, and tied in bunches and hung up or spread thinly on a floor where they can dry quickly. When dry and crisp, rub fine and bottle.

#### All the Following Herbs, 5c per Packet. Prices include postage.

duces the well-known Lavender water, the flowers for perfuming wardrobes, 

leaves in either a green or dry state are used for flavoring ..... 15c

SAGE.— The leaves and tender tops are used in stuffings and sauce; also in the beverage known as Sage tea...15c

PENNYROYAL.— Used medicinally 10c \*PEPPERMINT.— For flavoring. ...25c \*ROSEMARY.—Infusions of the leaves are used in medicinal beverages. Produces an aromatic oil.....35c RUE .-- Leaves are used in medicine, also for croup in poultry.....15c

Oz.	¼ lb.	0
ANISE.— Seeds have useful medicinal	/=	*LAVENDER.— By distillation pro-
properties; also used for flavoring10c	\$0.25	duces the well-known Lavender water,
*BALM.— Used for culinary purposes		the flowers for perfuming wardrobes,
and for making Balm tea25c	. 65	etc <b>1</b>
BASIL.— Used for seasoning soups,		MARJORAM. The Sweet aromatic
having a decided flavor of cloves15c	. 45	leaves in either a green or dry state
BORAGE Excellent for bees, flow-		are used for flavoring1
ers are also in request for garnishing15c	. 40	*PENNYROYAL.— Used medicinally 1
*CHIVE. — Has mild onion flavor;		
grows in grass-like clumps; much used		* <b>PEPPERMINT.</b> — For flavoring2
for flavoring10c		<b>*ROSEMARY.</b> —Infusions of the leaves
CORIANDER Seeds used in confec-		are used in medicinal beverages. Pro-
tions; leaves for soups and salads.	0.5	duces an aromatic oil3
Very aromatic	. 25	*RUE.— Leaves are used in medicine,
CARAWAY.— For flavoring, the seeds		also for croup in poultry1
being used extensively by bakers and	.25	*SAGE.— The leaves and tender tops
confectioners	\$1.00	are used in stuffings and sauce; also
<b>DILL.</b> — The flower heads and seeds are	<b>91.00</b>	in the beverage known as Sage tea1
used in soups, stews and pickles; leaves		SAFFRON Used for flavoring 2
have same flavor and can be used in		SAVORY (Summer). Used for fla-
like manner	.25	vocing
*FENNEL.— For garnishing and fish		THYME.— Broad leaved, used in soup
sauce10c	. 25	stuffing and sauce2
FENUGREEK.— For flavoring 10c		<b>*WORMWOOD.</b> — Taken as a tonic in
HYSSOP.— Used medicinally25c	. 75	the form of tea
*HOREHOUND.— Used medicinally		TANSY.— Used medicinally, as tea
as a cure for colds		and bitters
HERB SEF	DS F	OR FLAVORING

#### Anise.

Anise seed for flavoring. 1/4 lb., 15c; lb., 50c.

Coriander.

#### Coriander seed for flavoring.

For flavoring.

1/4 lb., 15c; lb., 30c; 100 lbs., market price.

Poppy

Seed used for flavoring. 1/4 lb., 15c; lb., 30c.

Celery.

**R** FLAVORING Caraway. We keep constantly on hand a large stock of well preserved seed for the use of Druggists, Bakers and Confectioners. 1/4 lb., 10c; lb., 30c; 100 lbs., market price. 'Dill.

Used to flavor soups, stews and pickles. The leaves possess similar qualities, and can be used in the same manner as the seeds. 1/4 lb., 20c; lb., 55c.

1/4 lb.

50

. 50

. 50

45

35

Oz.

. . 20c

. 10c

25c

#### Mustard.

For flavoring and pickling. Lb., 15c; postpaid, 25c; 100 lbs., market price.

#### FOREIGN NAMES OF HERBS

A Stands for Annuals or those generally used for such. B For Biennials. P For Perennials.

ENGLISH	FRENCH	GERMAN	ITALIAN.
A Anise	Anis	Anis	· Anacio
P Balm	Melisse-Citronelle	Citronen-Melisse	Melissa
. A Basil	Basilic-grand	Basilikum	Basilice
A Borage	Bourrache	Boretsch	Boragine
A Caraway	Cumin des pres	Feld-kümmel	Carvi
P Catnip	Cataire	Katzenmunze	Cataria
A Coriander	Coriandre	Koriander	Coriandorlo -
A-B Dill	Aneth	Dill	Aneto
P Fennel, Sweet	Fenouil	Fenchel	Finocchio
A Fenugreek	Fenugrec	Bockshornsamen	Foenungrasciene
P Horehound	Marrube Blanc	Andorn Kraut	Marrubio
P Hyssop	Hysoppe	Isop	Issopo
P Lavender	Lavende	Lavendel	Lavanda
A-B-P Marjoram, Sweet	Marjolaine	Majoran	Maggiorana
P Mint, Common	Menthe des Jardins	Münze	Menta
P Rosemary	Romarin	Rosmarin	Rosmarino
A Rue	Rue	Raute	Ruda
P Sage	Sauge	Salbei	Salvia
A Saffron	Safran	Safran	Zafferano
P Sorrel	Oseille	Sauerampfer	Acetosa
A Savory, Summer	Sarriette	Bohnenkraut	Santoregia
P Tansy	Tanaisie	Gemeiner Rainforn	Atanasia
P Thyme	Thym	Thimian	Timo
P Wormwood	Absinthe	Wermuth	Assenzio

Oz., 10c; 1/4 lb., 15c; lb., 50c.



## Foreign Names of Vegetables, Grains and Fruits

This List includes only those varieties that are in general cultivation.

ENGLISH

Artichoke Asparagus Beans, dwarf Beans, pole Beet Borecole or Kale. See Kale. Broccoli **Brussels** Sprouts Cabbage Cabbage Savoy Cauliflower Carrot Celery Celeriac Chervil Chicory Corn, Maize Corn Salad Collards Cress, Curled Cress, Water Cucumber Egg Plant Endive, Curled Endive, Batavian Garlic Horseradish Kale

Kohl Rabi Leek Lettuce Melon, Musk Melon, Water Mushroom Mustard Okra or Gumbo Onion Oyster Plant, see Salsify Parsley Parsnip Pea Pepper Potato Pumpkin Radish Rape Rhubarb Salsify or Oyster Plant Spinach Squash Tomato Turnip

Apple Apricot Cherry Currant Fig Filbert ' Gooseberry Grape Lemon Mulberry Nectarine Olive Orange Peach Pear Plum Pomegranate Quince Strawberry Blackberry Raspberry

FRENCH GERMAN Artichaut. Artischoke Asperge Spargel Haricot, Nain Bohnen Haricot a'Rames Betterave Chaa Brocolis Chou de Bruxelles Chou Pomme Chou de Milan Chou-fleur Carotte Celen Celeri-rave Cerfeuil Chicorie Sauvage Mais Mache Chow Coba Cresson Alenois Cresson de Fontaine Conconbre Aubergine Chicorie des Jardins Escarolle Ail Cranson or Le Grand Rai- Meerrettig fort Chou vert or non Pomme Blatter or Grünen Kohl Chou-rave Poireau Laitue Melon Melon d'eau Champignon Moutarde Gombaud Oignon Persil Panais Pois Piment Pomme de Terre Courge or Potiron Radis Navette Rhubarbe Salsifis Epinard Courge Tomate Navet FRUITS Pommier Abricotier Cerisier Groseiller Figuier Noisette Groseillier a Maquerlan Vigne Limonier Muvier Peche Lisse

Olivier

Pecher

Poirier

Prunier

Fraisier

Grenadier

Coignassier

Framboise

Murier de Renard

Oranger

#### Strangen Bohnen Rothe Ruebe Spargelkohl Rosenkohl Kopf Kohl or Kraut Wirsing Blumenkohl Gelbe Rübe or Mohre Sellerie Knoll-Sellerie Kerbel Gemeine Cichorie Mais Feldsalat Blatterkohl Garden-Kresse Brünnenkresse Gurke Eierpflanze Endivie Blat-endive Knoblanch Kohl Rabi

Gemeiner Lauch Lattich or Garten-salat Zucker-Melone Wasser-melone Essbare Batter-schwamme Pratajuolo bianco Senf Okra Zwiebel

Petersille Pastinake Erbse Pfeffer Kartoffle Melonen Kürbis Rettig Repskohl Ehabarber Haferwurzel & Bocksbart Sassifica Spinat Speisie Kürbiss Liebesapfel Rübe

Apfel Apricose Kirsche Johannisbeere Fege Nussbaum Stachelbeere Traube Limonie Maulbeere Nectarpfirsch Oelbaum & Olive Pomeranze Pfirsiche Birne Pflaume Granatenbaum Quitte Erdbeere Brombeere

#### ITALIAN

Carciofo Asparago Faginuolo Frihol Barbabietola

Broccoli Cavolo di Bruxelles Cavolo Cavolo di Milano Cavoliflori Carota Sedano Sedano-Rapa Cerfoglio Cicoria Mais. Valeriana

Crescione Crescione di Sorgenti Citrinolo Melanzana Indivia Escarolle Aglio Ramolaccio

Cavolo Verzotto or Verza Cavolo Rapi Porro Lattuga Mellone or Popone Cocomero or Anguria Senapa Ocra Cipolla

Prezzemolo Pastinaca Pisello Peperone Patata Zucca Ravanello or Radis Rapa Selvatica Rabarbaro Spinacio  $\tilde{zucca}$ Pomodoro Rapa

Melo or Pomo Albicocco Ciriegia Ribes. Fico Avellano or Noccinolo Uva-Spina Vite Limone Moro or Gelso Pesche Noci or Nettarine Ulivo Arancio Pesco Pero Susino Melagrano Cotogno Fragola Moro del Rovo Lampoine Rovoides

For German Names of Grains and Grasses see page "Planting Tables."

Himbeere



**True Type Market Size** 

"Diamond SEED POTATOES Quality

POTATOES are as sure and as profitable crop — investment and labor considered — as can be grown; L but best results can only be secured by growing varieties that are suited to your soil and climate, and using good seed, which must be properly planted and cared for. See Government Bulletin of the U.S. Department of Agriculture No. 47.

The select strains of Seed Potatoes that we offer for the Northwest, have been carefully bred up by experts who have made a life study of Potato growing, and their care and patient effort has resulted in establishing fixed strains of almost perfect types that cannot be duplicated elsewhere. We offer a complete assortment of splendid varieties suitable for all soils and conditions under which Potatoes can be grown and the past season has again proved the superiority of the varieties and seed stock that we grow and offer. Our own seed crop is large and of superior excellence.

This is the year to get a fresh start of vigorous true type stock that will yield the maximum crop of shapely, salable tubers.

# **Early Varieties** P. S. Co.'s "Earliest of All"

Never Known to Blight.

We have yet to find an early potato that can com-pare with our "Earliest of All." Its quick growth Its quick growth and early maturity give the ground for July planting, and a second crop can be grown the same sea-son. Summer drouth does not affect it, for its growth is complete before it can be injured. Planted early is ideal for "Dry Farming."

They can be had ready for baking nine weeks from planting, and fully matured in 12 weeks.

"Earliest of All" is a healthy, vigorous grower not subject to blight or disease and does not make a second growth. Keeps as well as any late potato.

A handsome, shallow eyed, white-skinned potato of the finest table quality.

> Price, 1 doz. eyes, postpald. 30c; 4 lbs., 80c, postpald; by Freight or Express, per peck, 75c; ½ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

> > PLANTED EARLY is the best potato for DRY FARMING

It is a very superior cooking

#### **Early Freeman**

A vigorous, productive, early potato of oval shape with russet skin, fine grained, white and floury. Not quite as early as "**Earliest of All**," but much earlier and a far better yielder than any other early variety. Tubers shapely and uniform, with very few small ones. We specially recommend Early Freeman as a potato of real merit. Try it.

Price, mail, 1 doz. eyes, 30c; 4 lbs. whole pota-toes, 80c, postpald. Frt. or Exp., pk., 75c; ½ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

#### **Early Sunrise**

The best early pink variety - earlier than Rose, about the same depth of color, not so flat but a smoother potato, a bit more slender than Rose; Sunrise is hardy, blight proof, and the best yielder of its type.

Price, postpaid, 4 lbs., whole potatoes, 80c; Frt. or Exp., peck, 75c; ½ bu., \$1.00; bu., \$1.75; 100 Ibs., \$2.50.

over other early Potatoes, as its white skin, large size and good keeping qualities make it an ideal main crop variety, that sells at the best price. We always advise early planting, as the crop will be larger and better. PRICE, postpaid, 4 lbs. whole potatoes, 80c;

**Early White Prizetaker** 

One of the finest of all early sorts; oblong in form, 4 or 5 inches in length, with white, smooth

potato, baked or boiled, cooking up dry and floury. White Prizetaker has important advantages

Freight or Express, peck, 75c; ½ bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.

#### Early Rose

Our stock of this popular variety is a special improved strain of our own growing; is very vigorous

Price, postpald, 4 lbs. whole potatoes, 80c;
Frt. or Exp., peck, 75c; ½ bu., \$1.00; bu.,
\$1.75; 100 lbs., \$2.50.

Ready for Use May 15th 7 Acres--160 Sacks per Acre "Earliest of All"

Gentlemen:-

Last year we planted about 7 acres of the Earliest of All seed potatoes. We got pure seed and the average yield was better than 160 sacks to the acre. W. W. HOTHOUSE VEGETABLE CO.

Walla Walla, Wn., 3-14-13.

Dear Sirs:-

skin and few eyes.

Early, Oregon, 10-19-13.

We can put early potatoes on the market by the first of June and were using your Earliest of All this season by the 15th of May.

H. K. PORTER.

#### **POTATOES** — Continued

UR SEED STOCK is grown by the originator who does not allow any other Potato in his fields, and to be sure of having the Genuine **Pride of Multnomah** 

always buy direct from our Store

## **PRIDE OF MULTNOMAH–Main Crop**

#### **Excells in Yield and Table Quality**

PRIDE OF MULTNOMAH, introduced by us five years ago, stands at the head of the list of main crop potatoes, excelling in yield, uniformity, and table quality; being fine grained, of snowy whiteness and for baking or boiling we have never known its equal.

The skin is thin, smooth and white; eyes shallow, shape distinctive.

We believe Pride of Multnomah is blight and disease proof, and we know it to be drouth resistant to a remarkable degree, having a mass of fine fibrous roots that retain the moisture, and promote a vigorous growth.

PRIDE OF MULTNOMAH is the best keeping potato ever known, and should be planted early to insure perfect maturity and finest quality.

Order now and have your potatoes when you are ready to plant. We have never had enough to fill all orders. Don't you be the one that is disappointed.

PRICE, postpaid, 1 doz. eyes, 30c; 4 ibs. whole potatoes, 80c; Freight or Express, 1 pk., 75c; 1/2 bu., \$1.25; bu., \$2.00; 100 ibs., \$3.00.

#### ."Would Beat the World"\_

#### Gentlemen:

Vancouver, Wn.,

Last season I secured one pound of your "Pride of Multnomah" Potatoes from which I cut 75 eyes, planting one to a hill. Fifteen of these hills failed to come, but from the twelve ounces of Potatoes planted, I dug 180 lbs., all fine, large Potatoes that are smooth and well shaped, just as described in your Catalog. The largest one was twelve inches long and eleven and a half inches in circumference and weighed two and a half pounds.

I have been growing your "Prizetaker" Potatoes, considering them the finest Potatoes obtainable in this section, either as an early or late variety; but, from the showing made by the "Multnomah," will plant them extensively next season, as we think **they would beat the world**.

C. R. MOHLER.

45

Four Hundred Bushels per Acre-PRIDE OF MULTNOMAH was sent East for trial, and out of 400 varieties was among the five first in point of yield — 400 busheis per acre — and surpassed all in uniformity and table quality —out of 80 varieties at Raynham, Mass., was among first three in yield and was far superior to all others in quality and uniformity, other heavy yielding sorts being coarse and inferior.

Our own seed crops run 400 bushels to the acre — shapely, salable tubers — are always free from blight, scab or disease of any kind — and we have never had a failure since their introduction

We Plant Early The Potatoes get a Good Start--they Average Better, Yield More and are fully matured at digging time--there will be fewer crop failures if YOU PLANT EARLY

### Formaldehyde for Potato Scab.

Soak the tubers before cutting for one hour and a half in a solution of 1 lb. (or pint) of Formaldehyde to 30 gallons of water. The potato fungus lives in the soil and on old vines; hence it is wise to keep it off your land by using Formaldehyde for your seed potatoes. Price, pint bottle, 40c; 2 bottles, 75c; gai., jug, \$2.50, sent by Freight or Express only, at purchaser's expense. Cannot be mailed. The potato fungus lives in the soil and on old vines; hence it is wise to keep it





Now Offered for the First Time.

"OREGON" was started nine years ago from a seed of "Bliss's Prize" and by careful selection has developed into a large, shapely potato; fine grained, of superb table quality and a hardy, vigorous grower, yielding 400 bushels per acre, far exceeding Burbank and Early Rose on same ground and matured two weeks ahead of "Rose."

**OREGON** is the famous "Kaplinger" potato that was furnished to the school children for the State potato contest and produced the record yield of 688 pounds from a single 14 ounce tuber. Mr. L. R. Alderman, at that time superintendent of Public Instruction, writes:

"Last year I had first hand information in regard to the Oregon potato. I found that it grows large, smooth and is very satisfactory in clay soil. I recommend this potato for the Willamette Valley.

An experienced grower and big producer for market, to whom we sent a trial lot, writes:

"Oregon is sure a wonder! Am digging now and the ground is fairly white with them."

PRICES — Select Stock — Postpaid — 4 lbs., 90c; by frt. or exp., peck, 75c; ½ bu. \$1.25; bu., \$2.00; 100 lbs., \$3.00

Eugene Drummond and his Oregon Potatoes.

Eugene Drumond, a schoolboy, of Albany, Ore., winner of the Kaplinger potato prize for school children—produced 688 lbs. of good potatees and a few culls (not shown), from a single

a few culls (not shown), from a single "Oregon" potato, the record before being 220 lbs. from 1 lb. of seed (11 small tubers), grown in England.

> Photo by F. M. Sherman, Lebanon, Ore.

You will be safe in planting Oregon, but Order Early—the demand is big—the supply limited

## New-Snow Potato

A splendid early maturing main crop Potato that gives a good yield on poor or light soil.

This fine potato, originating in Maine — a State famous for the quality of its potatoes—has proved a wonderful producer on poor soils where other varieties would not thrive.

Given good soil and culture, "Snow" produces enormous crops of fine large, oval tubers, slightly flattened, having shallow eyes and netted skin. "Snow" is fine grained, flaky and of excellent quality. The luxuriant vines are dark green. The potatoes grow close together with very few small ones.

"Snow" is a main crop potato, but makes an early and quick growth. Try it.

PRICE, 1 doz. eyes, postpaid, 30c; 4 lbs. whole potatoes, 80c; by Freight or Express, per peck, 75c; ½ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

#### Burbank

A standard commercial variety. We can offer a splendid strain of select Burbanks, not the "runout" stock generally seen, but the genuine article, which is a really good potato.

which is a really good potato. Price, postpaid, 4 lbs. whole potatoes, 80c. Frt. or Exp., peck, 75c; ½ bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.

#### The second

Gentlemen:-

Du Pont, Wn.

Wish to state that from the 15 lbs. of Pride of Multnomah seed potatoes, I have dug nearly 500 pounds of spuds. They are a fine potato and all you claim for them. EDW. A. ALPER.

Dear Sirs: Cresswell, Ore. Of the different kinds of Potatoes I bought of you last Spring, Ohio, Prize Winners, Hundred Fold, and Earliest of All, would say that I have a crop of choice potatoes; they are a nice size and smooth and clean, cook and bake just fine. DAVID FRANCIS.

#### Hundred Fold

A splendid new main crop variety of the same general type as Uncle Sam, but surpassing that excellent variety in many ways, being a splendid dry land Potato, an enormous yielder and of the finest quality, being white, dry and mealy at any stage of development. The skin is russet, which is a mark of quality.

Hundred fold is very hardy, with small vines, but the tubers are large and uniform.

Price, postpaid, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 80c; Frt. or Exp., pk., 75c; ½ bu., \$1.00; bu., \$1.75: 100 lbs., \$2.50.

#### **American Wonder**

American Wonder is not only one of the best main crop potatoes, but is also one of the **earliest** potatoes grown. It is a strong grower, and great producer. Tubers white, large and uniform in size; elongated, slightly compressed, with few eyes, and is of good **quality**.

Price, postpaid, 4 lbs. whole potatoes, 60c; Frt. or Exp., peck, 75c; ½ bu., \$1.00; bu., \$1.75: 100 lbs., \$2.50.

Write for price in quantity.

#### . All We Claim For Them \_

#### Oregon City, Ore.

Gentlemen:

I thought you might like to know what luck I had with seed bought of you last Spring. Well, the best was a sack of "*Pride of Multnomah*" Potatoes, which yielded me 34 sacks, very fine, large Potatoes, many hills containing 14 very long,— 12 to 14 inches — fine tubers; very few small ones. The "American Wonder" also did fine.

GEO. E. HAMILTON.



HERE are many varieties of grasses and forage plants offered by Eastern seedsmen (often under new names) that will not give profitable crops in our climate, and to avoid disappointment, we refer you to the following list, which has been carefully selected and contains the most desirable varieties for general and special purposes.

A careful reading of the following pages will give you much valuable information that has required years of observation and experimenting to obtain.

# = IMPORTANT, Read Carefully

Clover, Grass and Field Seeds are subject to market changes, therefore we can not print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted; or send in your order at catalog prices. We guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower, or if the difference is very great, we will notify you before shipment. No Premiums on Grass and Field Seeds.

Single pound prices include postage. If ordering by freight or express deduct 10c per pound; 100-pound prices subject to market changes. Seed to cover amount remitted always sent unless otherwise ordered. Write for prices on large quantities. 題

Write for Prices on 100-Pound and Ton Lots.

YOU WILL ALWAYS GET YOUR MONEY'S WORTH. 20

#### Artichokes

There is an unlimited market for Hogs and Artichokes are the cheapest and best feed. They They are also valuable to dairymen, never fail. being cheap, and good milk producers.

RTICHOKE

Planted and cultivated same as potatoes. Of great value for feeding stock. They are the best hog feed known; are remarkable for their fattening properties, great productiveness (over one thousand bushels

having been raised on one acre) and ease with which they can be grown. They need not be dug. Turn the into the hogs field, and they will help themselves by rooting. One acre will keep from twenty to thirty hogs in condition from October until

April, except when the ground is frozen too hard for them to root. They are said to be a preventative of cholera, and other hog diseases. and are also highly recommended for milch cows, increasing the yield of milk and at the same time improving their condition. acre early in the Spring. Plant ten bushels per

Note .-- Tubers on hand from January to May Per lb., postpaid, 15c; 100 lbs., \$2.00.

#### **Cow Peas**

Are really small beans of vigorous vining habit and heavy foliage of great nutritious value, yielding five to nine tons of green feed per acre, or can be cut and cured like clover. They are great nitrogen gatherers and one of the best fertilizers when turned under. Sow two bushels per acre.

Whip-Poor-Will.— Upright, or bush growth, earliest maturing, easily harvested. Per lb., postpaid 20c; 10 lbs., 85c; 100 lbs., \$7.25.

**Clay.**— Of vigorous growth. Excellent for en-silage; can be planted in hills with corn.

Per lb., postpaid, 20c; 10 lbs., 85c; 100 lbs., \$7.00.

New Era-Early, Prolific, of upright growth, also makes good dry fodder. 100 lbs., \$7.00.

#### BUCKWHEAT

Buckwheat is a valuable crop that can be easily grown wherever wheat will grow, producing a good yield even on light or poor soil and under favorable conditions is very profitable, being in big demand for milling — and is also the best "Bee pasture."

Sow 36 lbs. per acre in drills, 48 lbs. broadcast. We recommend the Japanese variety. Common, per lb., postpaid, 20c; 100 lbs., \$4.25.

Silver Hull. Of a light gray color, rounder than the common; has a thin husk; matures earlier and yields heavily. An excellent milling variety.

Per lb., postpaid, 20c; 100 lbs., \$4.59. Japanese.- Ripens early - is hardy and yields the largest crops. The grains are extra large, dark brown, very thin hulled and makes the highest grade of flour. Good seed stock has been very scarce for several seasons, but we now have a fine lot which we can offer at a very low price.

Per lb., postpaid, 20c; 100 lbs., \$4.50.

#### Cow or Thousand Head Kale **Plants in Season**

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by Agricultural Colleges and Government Stations. Cow Kale should be grown in the same manner as cabbage. Make the rows 4 feet, plants 3 feet apart in the row. Can be set as late as July. Write for full information on Planting and Feeding.

Postpaid, 1 oz., 10c; 1/4 lb., 20c; 1 lb., 60c.

#### Emmer

#### (Triticum Dicoccum.)

Highly recommended by the Department of Agriculture as a forage or grain crop for the Northwest; similar to barley in growth, but produces two grains in a spikelet. A comparatively new and profitable crop, yielding 50 to 100 bushels of grain. or four to six tons good hay per acre. Thrives well on poor soil, and dry weather seems not to affect it. After threshing, the straw makes good feed. Sow in Spring at rate of 75 to 100 pounds per acre. It is advisable to roll or chop the grain before feeding. Emmer is often listed and referred to as "Spelt," but is very different and superior in every way. We offer choice, recleaned seed of the true variety Write to the U. S. Department of Agriculture for Farmers' Bulletin No. 466.

Price, postpaid, per lb., 15c; 100 lbs., \$2.75.



#### Prizewinning Sheaves of "Climax"

**T**HE production of fine seed oats has always been one of our leading specialties and we consider them to be the most profitable and satisfactory grain crop, being indispensible to stock and dairymen, and their use as a food is constantly increasing.

Planted in season, oats rarely fail, are easily and cheaply grown, and the valuable new varieties which we offer will double the number of bushels per acre that you would get from common seed oats, which means half the cost of production, or twice the profit.

They will mature in July from Spring sowing, giving quick returns and leaving the soil in good condition for Fall planting.

Of what other grain crop can so much be said and what other crop is more necessary and valuable to the dairy and stock man?

We offer select, recleaned, well-matured seed oats of standard varieties, suitable for this section, and our own varieties, "Shadeland Challenge" and "Shadeland Climax," the earliest and most vigorous, heaviest yielding oats ever grown anywhere.

## Shadeland Oats

SHADELAND OATS are grown especially for planting purposes and each year typical heads are selected in the field by hand, and from these new seed is grown for revitalizing and perpetuating the type, and maintaining the standard.

Shadeland Oats have an unparalelled record as prizewinners wherever shown, and one exhibit of "Climax" grown by Mr. Callison, of Kendrick, Idaho, has netted nearly \$700.00 in prize money at big expositions in the United States and Canada.

## **Shadeland Climax**

For early Spring planting where seasons are short, in high, dry altitudes, and where quick growth and early maturity are demanded, "CLIMAX" is superior to any Oat ever before known, and will give you a bountiful harvest of the finest oats you ever saw. The white grains are uniformly large, plump and full with a very thin hull and are often borne 3 in a spikelet, which partly accounts for its wonderful yield. In our trials "SHADELAND CLIMAX" has not been injured by severe early freezing and later drouth, but has stood up, green and vigorous, yielding one hundred bushels per acre on hill land when

drouth, but has stood up, green and vigorous, yielding one hundred bushels per acre on hill land when oat crops throughout the same section were stunted and dried up. If you live West of the Cascade Mountains you can plant "Climax" Fall or Spring, any time the

ground is fit, but where the climate is severe, Spring plantings are best. Price, postpaid, 1 lb., 20c; 4 lbs., 70c; Frt. or Exp., ½ bu., \$1.00; bu., \$1.50; 100 lbs., \$4.00.

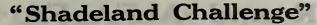
Price, postpaid, 1 ib., 20c; 4 ibs., 70c; Frt. or Exp., ½ bu., \$1.00; bu., \$1.50; 100 ibs., \$4.00.



Field of Shadeland Oats grown by Mr. G. M. Scramlin

#### A GOOD AVERAGE

G. W. Scramlin, of Macksburg, Oregon, advises that from five acres of Shadeland Oats he cut an average of 93 bushels per acre. Planting was made on the 26th day of April but owing to the cold rains seed did not germinate for over two weeks. Oats were harvested on the 10th of August. Mr. Scramlin reports that the yield would have been much heavier but a storm lodged a part of them, which were lost.



OUR wonderful white side "Challenge" Oats is hardy, vigorous, early maturing, and still maintains its supremacy as the best, heaviest yielding, general purpose Oat in existence.

"Shadeland Challenge" is a heavy, plump, thin hulled oat whose immense heads often measure 18 inches in length, bearing from 250 to 300

Shadeland Challenge ripens in kernels. about 100 days from planting if Spring sown, and 100 bu. per acre is not uncommon on ordinary soil. We introduced "Shadeland Challenge" as a Spring Oat, but careful and conclusive tests have demonstrated that it gives even better results, if possible, from Fall planting. Hundreds of our cus-tomers from every section have testified to the wonderful yield and splendid quality of this grand Oat. **Price, postpaid, 1 lb., 20c; 4 lbs., 60c. Frt., ½ bu., 75c; bu., \$1.25;** 100 lbs., \$3.25.

To know that you are getting the genuine "Shadeland" oats from the originator, always buy direct from our Store. Prices are so low that you can not afford to risk any other seed oat.

# SENATOR-A New Garton Side Oat

Senator is highly recommended by the originators for its extreme earliness and great fertility — being **especially adapted** to heavy land. We give our growers report as follows:

The SENATOR OATS were planted May 15th, at which time we had a slight shower, enough to sprout them. They were drilled on land prepared for clover, and had but one or two light rains from planting until harvest —August 17th,— 93 days from planting. Earlier seeding would have filled them even better. They also had several days of hot winds before being bound but threshed out beautifully wielding 96 bushels even better. They also had several days of hot winds before being bound, but threshed out beautifully, yielding 96 bushels per acre. Seeded on good land this oat will do well, and where oats are liable to lodge SENATOR will stand up — has stiff straw. Note the size of grains and the fine color. C. D. NAIRN.

Considering the late planting SENATOR made a wonderful showing. Order Early-stock is limited. Postpald, 1 lb., 20c; 4 lbs., 70c. By Freight or Express, 1/2 bu., \$1.00; bu., \$1.50; 100 lbs., \$4.00.

## **Standard Seed Oats**

Choice Recleaned Stock of the following varieties can always be supplied.

#### **Gray Winter**

This Oat is planted extensively throughout the Northwest as a Fall or Winter Oat. Is well and favorably known, being a good yielder, and the Oats are large and plump. Price, postpaid, 1 lb., 15c. Frt. or Exp., 100

lbs., \$2.20.

#### White Seed Oats

We always try to have a selected re-cleaned stock of No. 1 White Seed Oats which we can supply at market price. Write for samples and prices on the quantity you require, or send in your order. You will always get full value for money sent.

Price, postpaid, 1 lb., 15c; 100 lbs., \$2.10.

**Black Russian** 

A hardy Winter tree Oat that will thrive on any well drained soil. Straw medium to large; stands up well, ripens early and yields heavily. Our stock is true and clean.

Price, postpaid, 1 lb., 15c; 100 lbs., \$2.25. **Swedish Red** 

A comparatively new tree Oat from Sweden having a soft hull and fine soft straw which is ideal for hay. This is the Oat grown so extensively in Northern California and along the Southern Oregon Coast. Sow in Fall or Winter. Red Oats always bring a good price in the market. Price, postpaid, 1 lb., 15c; 100 lbs., \$2.25.

## Formaldehyde

#### A Preventive for Smut In Grain—Scab and Fungus Diseases of Potatoes.

Formaldehyde is a clear chemical, resembling water, but has a peculiar odor. It is sold by the pound (pint). One pound is sufficient to treat 40 to 50 bushels of oats. The following method is in general use: To treat 20 bushels requires 1/4 pint of Formaldehyde diluted

with 5 gals, of water. Spread the oats on a floor and sprinkle with the diluted solution. Then turn them twice with a scoop shovel. Allow to stand for 12 hours. Then spread to dry. Any quantity can be treated by using the same proportions. Oats thus treated will be entirely free from smut. Prices, Page 45.



"SHADELAND

CHALLENGE



Oregon Field of Red Clover falfa or I ucerne lover

A LFALFA should be cut just before coming into bloom. The hay is especially valuable for dairy cows. As soon as cut it immediately commences to grow, and during the hottest and driest weather, when other grasses are parched and withered, it remains fresh and green and grows as rapidly as ever. Ou the low lands it is not an unusual thing to harvest five or six crops of hay from the same field in one season without irrigation, and the same result is obtained on high, dry lands where irrigation as resorted to. It will not succeed on hard clayey soils. Its roots, in seeking moisture, penetrate to incredible depths. The seed should be sown in the Spring, after danger from freezing the young plants is over, or in the Fall, early Per Ib., postpaid, 25c; 100 lbs., \$15.00. enough to give it a good stand before frost.

#### **Dry Land Alfalfa**

This new Dry Land Alfalfa will produce large, profitable crops of hay and excellent pasture on the high, dry lands of Eastern Oregon, Washing-ton, Idaho and Utah. Dry Land Alfalfa is espe-cially recommended for the hills and plateaux where irrigation is impossible. It comes from the **highest**, **driest alfalfa sections**, and is very superior seed superior seed.

Per lb., postpaid, 25c; 100 lbs., \$15.00.

Write for prices on 100 lbs. or ton lots.

Clovers

White Dutch Clover

(Trifolium Repens.) A small variety, having a white blossom. Of a vining nature, spreading rapidly. Superior for pasture and unsurpassed for the production of honey. It also makes a beautiful lawn when mixed with Blue Grass.

Choice Seed, per lb., postpaid 50c; 10 lbs., \$4.00. Fancy Seed, per lb., postpaid, 60c; 10 lbs., \$4.50.

#### **Red Clover**

(Trifolium Pratense.)

The standard Clover for all purposes. Hardy and succeeds well on any good soil. Makes superior hay — especially mixed with Timothy — either for dairy cows or for general use.

Per lb., postpaid, 30c; 100 lbs., \$16.50. Fancy, 100 lbs., \$17.50.

**Mammoth Red Clover** 

Grows very large and is used almost exclusively for plowing under for manure.

Per Ib., postpaid, 18c; 100 lbs., \$30.00.

#### **Bokhara Sweet or Honey Clover** (Melilotus Alba.)

rapid-growing, white-flowered sort; excellent for bees. Sow 10 pounds per acre.

Per lb., postpaid, 40c; 100 lbs., \$26.50.

#### **Turkestan Alfalfa**

Will produce a luxuriant growth in the driest and hottest sections, without irrigation. It is perfectly hardy and will stand extreme cold in Winter without harm. It yields a very heavy and rich crop of hay and makes a permanent pasture. We have the genuine imported seed.

#### Per Ib., postpaid, 25c; 100 lbs., \$16.00.

They are always subject to market changes.

#### **Crimson or Scarlet Clover**

(Trifolium Incarnatum.) Highly recommended for pasture and fertilizing purposes. It is a thrifty annual, growing from twenty to thirty inches high. It germinates quickly, grows rapidly and stools abundantly. Cut for hay when in full bloom. Planted in the Fall can be plowed under after blooming in the Spring and be followed with barley or potatoes. Per Ib., postpaid, 30c; 100 lbs., \$16.50.

#### Alsike or Swedish Clover (Trifolium Hybridum.)

perfectly hardy perennial variety which is A rapidly growing in popular favor. Excellent for hay and pasture. Valuable for bees. Resists both hay and pasture. Valuable for bees. Resists both drought and excessive moisture. The hay of this variety is greatly preferred by some to that of Red Clover, for the reason that it is generally finer, brighter and not so dusty, making it better for horses. **Per Ib., postpaid, 35c; 100 lbs., \$19.00.** Fancy, 100 lbs., \$21.00.

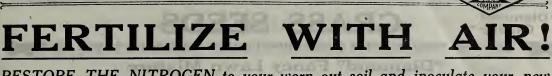
#### Esparsette or Sainfoin

(Onobrychis Sativa.)

A deep rooting, perennial legume, extensively cultivated in dry, calcareous soils, which are too barren for Clover or Alfalfa. Sow 50 pounds per acre. Per lb., postpaid, 30c; 100 lbs., \$16.00.

GRASS SEEDS Are Sold at Lowest Market Price and No Premiums Can Be Given.

COMPLETE SEED ANNUAL



RESTORE THE NITROGEN to your worn out soil and inoculate your new ground with fresh, virile, nitrogen-fixing bacteria. YOU CAN DO IT WITH

## FARMO TRADE

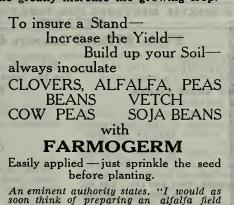
A pure culture of the most active nitrogen gathering bacteria.

NITROGEN is the most important and expensive plant food. The air is four-fifths nitrogen the soil is full of air-but plants cannot absorb it without the aid of nitrogen gathering bacteria.

FARMOGERM makes this vast storehouse of nitrogen quickly available. A one-acre packet costing \$2.00 used on a leguminous crop will gather and store nitrogen equivalent to 1000 pounds of nitrate of soda and at the same time greatly increase the growing crop.



Nitrogen gathering Nodules on Vetch



An eminent authority states, "I would as soon think of preparing an alfalfa field without seed as to soow the seed without in-oculation." (See Farmers' Bulletin No. 257 U.S. Dept of Agriculture.)

ABSOLUTE PROOF Is the name of a booklet full of unsolicited endorse-ments from experimental stations, agricultural colleges and other high authorities. This booklet and full information on request.

Nitrogen gathering Nodules--Alfalfa

51

MARK

## SEE THAT AIR TUBE?

It Supplies Fresh Nitrogen Without which the cultures will not live.

When put up in sealed bottles they soon lose their vitality, becoming inactive.

FARMOGERM is guaranteed to retain it's original vitality for two years, and is the only preparation of its kind that is not sealed.

LOOK FOR THE **GLASS TUBE** "It Keeps Them Alive."

#### North Carolina Experimental Station

"I am now, after being a doubting Thomas, ready to recommend the use of Farmogerm to the farmers for the inoculation of legume seed.' Prof. W. E. MASSEY, N. C. Exp. Sta.

State College of Agriculture University of Georgia

"Where the seed was inoculated vetch grew 3 feet tall - a perfect stand; where not inoculated, they came up but soon died.

LOY E. RAST, (Signed) Instructor in Agronomy.

#### **Rhode Island Experiment Station.**

Kingston, R. I. Farmogerm furnished by you to Mr. Geo. S. Baker, of Providence, has given remarkable results. I have in my personal films and I have in my possession films and prints showing difference between inoculated and uninoculated areas - you will be pleased to see them. R. J. WHEELER, (Signed)

Director.

FARMOGERM is prepared for Alfalfa, all Clovers, Canada Field Peas, Cow Peas, Garden Peas and Beans, Soja Beans, Vetches and Sweet Peas.

Postpaid—Garden Size, ¼ acre, 50c; 1 acre \$2.00; 5 acres \$9.00 Special Sweet Pea, trial size 25c; Regular size 50c.

When ordering be sure to state just what you want to inoculate



#### "Diamond" Fancy Lawn Mixture

 ${f T}$  O have a good lawn the soil must be fine and rich, and well leveled. Then the best seed obtainable should be used. Plant any time from September until late Spring, depending upon the weather and soil conditions. Raking in the seed is advisable, and rolling greatly improves the turf. In watering your lawn soak it deeply and not too often, as light watering every day brings the roots close to the surface, where they quickly burn or dry out. You must not expect to make a fine lawn with cheap seed. The best lawn grass mixture will cost more at first than the poorer substitute, but it will be found much cheaper and more satisfactory in the end. Our "Diamond Quality" Fancy Mixed Grass Seed is prepared from the choicest recleaned Grass Seeds that have been carefully selected for their fineness and deep rooting, close growing behing the product of the product of the set of habits and seasonable qualities, producing an ideal dense, velvety turf of lasting quality that remains green throughout the year.

Growing tests have proved our "Diamond Quality" Lawn Grasses to be superior to any other mixture for our Western soils and climate; it is also free from chaff and foul seeds, weighing 23 pounds to the measured bushel. This is a guarantee of clean, plump seeds, as cheap chaff seed is very light.

Price, per lb., 45c; postpaid, freight or express, per lb., 35c; 10 lbs., \$3.25

Sow one pound to 400 square feet, 10 to 15 pounds to a 50-foot lot.

WRITE US FOR SPECIAL MIXTURES FOR TERRACES, SHADY PLACES, DRY OR WET LAND.

#### **Fine Mixed Lawn Grass**

For use where a temporary lawn must be quickly prepared, and if kept closely cut will be lasting and have a handsome appearance. This is a good, clean mixture, composed of hardy, compact grow-ing grasses, and for the price is a good value. Per lb., postpald, 30c; by express, 10 lbs., \$1.75.

#### **Kentucky Blue Grass**

(Poa Pratensis.)

One of the best grasses for permanent pasture, furnishing a constant supply of the most nutritious feed during the greater part of the year. Sow 28 pounds per acre.

For Lawns.—Blue Grass is used very ex-tensively for lawns and is found in all lawn grass Sow 1 lb., to 400 sq. feet if used alone. mixtures.

Per lb., postpaid, 30c; 100 lbs., \$15.00. DIAMOND FANCY. Per 100 lbs., \$17.00.

#### **Canadian Blue Grass**

(Poa Compressa.) Recommended in all pasture mixtures on dry soil; thrives well on clay or hard trodden and poor Sow 28 pounds per acre. Per lb., postpaid, 25c; 100 lbs., \$14.00. soil.

## **English Rye Grass**

(Lolium Perenne.)

A strong growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. Forty pounds per acre. **For Lawns** this is used and recommended by many gardeners. If sown thickly it makes a

fine lawn, and for large grounds and parks it is very successful. Per lb., pd., 20c; 100 lbs., \$7.50.

### **Crested Dogs Tail**

#### (Cynosurus Cristatus.)

perennial grass with short, narrow leaves; valuable for lawns or pastures on dry, light land; makes excellent sheep pasturage. Use 20 pounds per acre if sown alone. Per lb., postpaid, 50c; 10 lbs., \$4.00.

# **Bermuda Grass**

(Cynodon Dactylon.)

Suitable only for climates where the Winters are not below the freezing point. It stands the Sow six pounds per hottest and driest season. Per lb., postpaid, 75c. acre.

#### **Tall Fescue**

#### (Festuca Elatior.)

Succeeds best in moist alluvial and strong clayey soils; is very productive and lasting; valuable for permanent pasture, is relished by stock and on rich land makes fine hay — height 3 to 4 feet; 22 lbs bu. Per lb., postpaid, 45c; 10 lbs., \$3.00.

## **Red or Creeping Fescue**

(Festuca Rubra.) Forms a close turf and is valuable for lawn and golf mixtures; thrives in sandy soils and along the Coast. (14 lbs. to the bushel.) Price per lb., postpald, 40c.

#### **Fine Leaved Fescue**

(Festuca Ovina Tenuifolia.) Grows well on dry or poor soil and is much used for lawns. Plant 30 lbs. to the acre. (Bu. 14 lbs.) Price per lb., postpaid, 65c.

# Creeping Bent Grass (Agrostis Stolonifera.)

Well adapted for sandy pastures, near the Coast, and good for pasture on low lands. If sown alone, use 25 pounds per acre. Excellent for lawns. Use 12 to 15 pounds per 50-foot lot.

#### Per lb., postpald, 45c; 100 lbs., \$34.00.

#### **Rhode Island Bent**

(Agrostis Canina.) Resembles Red Top. Makes a close sod; valuable for permanent pastures and meadows. Twentyeight pounds per acre. For \2 wms, use 12 to 15 pounds per 50-foot lot. Gives good results. Per lb., postpaid, 45c; 100 lbs., \$33.00.

**Italian Rye** 

#### (Lolium Italicum.)

A quick-growing grass, attaining a height of  $2\frac{1}{2}$  to 4 feet; very desirable for temporary meadows or pastures (will last from two to six years). Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable. Sow 40 pounds per Per lb., postpaid, 20c; 100 lbs., \$8.25. acre.

#### **Sweet Vernal**

#### (Anthoxanthum Odoratum.)

Valuable to put in pasture mixtures and lawn grass on account of its earliness and its delightful fragrance when in bloom. Thrives under all growing conditions, but is only recommended for use in mixtures. If alone use 28 lbs. per acre. ANNUAL, per lb., postpaid, 35c; 100 lbs.,\$25.00.

#### PERENNIAL, per lb., postpaid, 65c; 100 lbs., \$50.00

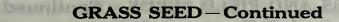
#### Wood Meadow Grass

#### (Poa Nemoralis.)

Thrives in shaded situations in woodland parks or lawns where other grasses would not grow. Is early, permanent, hardy, resists heat and cold and makes a good turf, and is good for pasture; 3 lbs. to acre; 19 lbs. to bu. **Per lb., postpaid, 60c.** 

#### Water Meadow Grass

(Poa Aquatica.) An excellent pasture grass for wet situations, es well in bogs and marshes. 20 lbs to acre. does well in bogs and marshes. Per lb., postpaid, 50c. 11 lbs. to bu.



Grass Seed prices subject to change without notice. See page 47.

#### Timothy

(Phleum Pratense.)

This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the Spring or Fall. Sow 15 to 20 pounds per acre. Per lb., postpaid, 20c; 100 lbs., \$6.75.

#### **Orchard Grass**

(Dactylis Glomerata.)

One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. Sow 28 pounds per acre. Per Ib., postpaid, 30c; 100 lbs., \$16.75.

**Red Top** 

(Agrostis Vulgaris.)

A good perennial grass. Generally sown for permanent pastures. Does best on moist or even marshy land. If the ground is not overflow land it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsyke Clover. Sow 28 pounds per acre chaff seed; 14 pounds hulled. CHOICE CHAFF per 1b., postpaid, 30c; 100

Ibs., \$17.00. CHOICE HULLED, a very superior grade of Red

Top that is free from chaff and light seed. Per Ib., postpaid, 40c; 100 lbs., \$24.00. DIAMOND FANCY HULLED.

#### Lb., 40c; 100 lbs., \$28.00.

**Meadow Fescue** 

(Festuca Pratensis.)

Perennial; grows three to four feet high. Roots deep, thus resisting drouth. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pastures, being valuable to mix with other kinds. Sown alone, use 40 lbs. per acre. Per Ib., postpaid, 25c; 100 lbs., \$14.00.

#### **Bromus Inermis**

(Russian Forage Grass-Awnless Brome Grass This Bromus, on account of its strong perennial character, and its unusual drouth-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. It will stand the longest drouth of all foliage plants. Its running roots take a deep and permanent hold upon the land, and it will replace in a large degree, the fast disappearing Bunch Grasses of Eastern Oregon and Eastern Washington, where it has done well. It grows luxuriantly, is freely eaten in either the dry or green state by cattle and yields enormously, making the **best of hay** for horses and cattle. It is a perennial and yields from 4 to 6 tons to the acre. Sow 25 to 30 pounds per acre. Spring or Fall. Seed weighs 14 pounds per bushel.

Per lb., postpaid, 30c; 100 bs., \$16.00.

#### Water Grass-Large

(Paspalum Dilatatum Poir.)

A coarse, leafy perennial 2 to 5 feet high; an excellent pasture grass of special value for late Sum-mer and Fall — making its principal growth at that time. Thrives best on low, moist soils, but when well established endures prolonged drouth without injury. Especially valuable in Southern states for hay or pasture mixtures—makes its best growth after the first year. Sometimes called "Dallis grass." Per lb. postpaid, 50c; 10 lbs. \$3.70; 100 lbs.\$35.00

#### **Tall Meadow Oat Grass**

(Avena Elatior.)

Often attains a height of three to four feet by the middle of June. Makes splendid hay and thrives on sandy loam, but makes its best growth where there is some clay. Can be fed as a pasture grass, and will generally bear cutting three times. For mixing with Perennial Rye and Alfalfa for sandy soils it is excellent. Sow about 30 to 40 pounds per acre alone, or half that amount if mixed with the above varieties.

Per lb., postpaid, 35c; 100 lbs., \$19.00.

## **Cheat Seed**

(Bromus Secalinus)

Cheat yields a good crop of hay, especially on low or moist soil and will stand considerable overflow without harm. It makes an excellent hay for cows or horses, but should be cut before it gets too ripe. Sow in the Fall or early Spring same as oats and about 100 pounds per acre.

#### Per Ib., postpaid, 15c; 100 lbs., \$1.85.

#### Mesquite

(Holcus Lanatus.) It is usually sown on virgin soil, without culti-vation, after the ground has been burned over. Sow about 35 pounds to the acre chaff seed; hulled 15 pounds per acre.

FANCY HULLED Seed, per lb., postpaid, 30c; 100 lbs., \$16.00.

CHAFF SEED, Choice; per lb., postpaid, 20c; 100 lbs., \$9.50.

#### **Hard Fescue**

(Festuca Duriuscula.)

Fine, rather dwarf, justly noted for its drouth resisting qualities. Valuable as a pasture for sheep. Sow 20 pounds per acre. Per lb., postpaid, 40c; 10 lbs., \$2.50.

#### **Rough-stalked Meadow Grass**

(Poa Trivialis.) A most valuable grass which flourishes in moist,

rich soils. Roots are perennial, but soft; foliage freezes down.

#### Per lb., postpaid, 60c; 10 lbs., \$4.50.

#### **Sheep's Fescue**

(Festuca Ovina.) Grows freely in high, dry and open pastures. Its chief merit is for sheep pasture. Thirty-five pounds to the acre.

#### Per lb., postpaid, 40c; 10 lbs., \$2.75.

#### Water Fescue

(Glyceria Fluitans.)

This grass grown naturally in and beside ditches pools, rivers and marshes. Sow 15 to 20 pounds per acre, Fall or Spring. Per Ib., postpaid, 70c.

#### **Reed Canary Grass**

(Phalaris Arundinacea.)

#### Will Grow on the Wettest Land You Have.

A grass that will grow on stiff, wet land, even if the ground is overflowed for a month or six weeks. Makes a good hay if cut early in the season. Sow 10 pounds per acre. **Price**, ½ **1b.**, **35c**; **1b.**, **85c**, **postpaid**.

FOR SPECIAL MIXTURES for BURNS, DRY or WET LANDS -Temporary or Permanent Plantings for Hay or Pasture — WRITE US

A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill BE SURE YOU GET A "CLIPPER." The mill with the "VERTICAL BLAST" Special Catalog and Full Information on Request.



**No. 1. For Good Loamy soll.** A mixture of Grasses and Clovers, prepared especially for good, loamy soils, that will give satisfaction as a permanent pasture, or for mowing for mixed hay. For pasture, sow 20 pounds per acre.

Price, postpald, 35c per lb., By freight or express, 10 lbs., 22c per lb.; 15 to 50 lbs., 20c per lb. 100 lbs., \$18.00.

#### No. 3. For Light Sandy Soll.

An extra fine mixture for sandy or light soils. This will make a good, strong turf, that under ordinary circumstances, should last for many years. Sow 20 pounds per acre.

Price, postpaid, 35c per lb. By frelght or express, 10 lbs., 22c per lb.; 15 to 50 lbs., 20c per lb.; 100 lbs., \$19.00.

No. 4. For Dry Land. Mixed especially for the regions between the Cascades and Rocky Mountains, and on good, common wheat land. Try this mixture, as we believe that it will give you best possible results. Sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 25c per lb.; 15 to 50 lbs., 24 ½c per lb.; 100 lbs., \$22.00.

#### For Arid or Alkali Land. No. 8.

Particularly for arid alkali lands. This mixture is composed of varieties that have proven to be the best for the soils mentioned. Sow 20 pounds per acre.

Price, postpald, 35c per lb. By freight or express, 10 lbs., 25c per lb.; 15 to 50 lbs., 24c per lb.; 100 lbs., \$23.00.

## BARLEY

**B**ARLEY is a shallow feeder, the roots growing near the surface, and requires a rich, mellow soil. Barley responds readily to good tillage and any extra work with the disc and fine tooth harrow will be amply repaid. Do not try to grow upon poor, sandy or wornout soils, or where the ground is not in good condition or well drained. In rotation, Barley follows Corn, Peas, Potatoes, or any cultivated crop, and is the best nurse crop for starting clovers or mixed grasses. Should be planted late after ground is warm and Spring blooming in the Spring, leaves the soil in fine condition for barley.

#### New-"Oderbrucker" Barley

This is a Pedigreed strain of 6-row barley, selected and bred by the University of Wisconsin and is considered the earliest maturing, most prolific of all the barleys. This is the variety that was secured at great expense by the Oregon and Washington Railroad Co. for introduction in their territory. We offer the genuine stock of our own growing. **Price:** 1 lb., postpaid, 20c; Frt. or Exp., 10 lbs. 50c; 100 lbs. 55 Price: 1 lb., postpaid, 2 lbs., 50c; 100 lbs., \$3.50.

#### White Hulless or Bald Barley

White Hulless, or Bald Barley .- A grand barley for stock feeding. Grain plump, heavy and when threshed is hulless like wheat. A heavy When grown and cut for hay it produces cropper. a magnificent fodder, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Culture same as Common Barley.

Per lb., postpaid, 15c; 100 lbs., Market Price.

#### **Common Barley**

We always aim to have a nice, clean stock of good Seed Barley on hand at all times. Per Ib., postpaid, 15c; 100 lbs., \$2.25.

#### **Beardless Barley**

The Beardless .-- The earliest barley known. straw is about the height of the Common Barley, but better, and will stand up on any land; with good season and land, has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. Many farmers will not grow barley on account of the long, harsh beards which are so disagreeable in threshing, although it is a profitable This is beardless ,and as easy to grow and crop. handle as oats. It is becoming more popular each Per lb., postpald, 15c; 100 lbs., \$2.35. season.

#### **Black Hulless Barley**

# Best grain for feeding or fattening stock. Greater food value than corn.

Black Hulless Barley will thrive on the dry Alkali soil where no other grain will grow. Sow in the Fall or Spring as late as June 15, 75 to 100 lbs. per acre. Will yield as high as 75 bushels to the acre, weighing about 70 lbs. to the measured bushel; does not shatter or shell out easily.

When planted in the Fall its abnormal stooling habit and wide succulent leaves make it ideal for late Fall pasture; yielding a full crop the next season. Stock prefer it to any other food.

Per Ib., postpald, 15c; 100 lbs., Market Price

#### Millets

Sow in April, May or June, 12 to 15 lbs. for seed, or 20 to 30 lbs. for hay per acre

#### German, or Golden

An improved variety, yielding a larger crop of seed than the Common Millet. It is also taller than the Common, and yields a heavier crop of hav. Per lb., postpaid, 20c; 100 lbs., \$5.25.

#### Hungarian

A dwarf annual Millet. It is finer than the Common or German Millets, but produces a closer stand and yields almost as much per acre as the taller varieties. Superior for hay.

Per lb., postpald, 20c; 100 lbs., \$5.00.

#### New Siberian

New and wonderfully productive. Extremely hardy, and about two weeks earlier than the German Millet, growing four feet in height.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

#### Common

A well known variety growing from three to four feet high; has broad blades and strong stalks. Per lb., postpald, 20c; 100 lbs., \$4.75.

## **Broom Corn Millet**

Broom Corn Millet is somewhat variable in character and is divided into several varieties, one of which is sometimes called Hog Millet, as the seed is often used to feed hogs. All of this class are better adapted to produce seed than for pasture. Per lb., postpald, 20c; 100 lbs. \$4.75.

#### **Early Fortune**

Early Fortune Millet has given astonishing yields of both seed and fodder. It is very early and is claimed to be rust-proof. The fodder can be fed to horses and other stock without injury, even after the seed has formed, which cannot be done with safety, with most of the millets. The seed is large and of a beautiful red color.

Per lb., postpald, 20c; 100 lbs. \$5.25.

54

# **GRAIN AND FIELD SEEDS**-Continued The Non-Saccharine Sorghums Wonderfully productive and of great value as a forage, ensilage or grain crop in dry sections



#### "MILO" grown by Dr. Seaver

#### VETCHES OR TARES **Greatest Forage Plant.**

Common, or Spring.--(Vicia Sativa.) One of the best forage plants that can be grown on the Pacific Coast. Often called Fall Vetches. This is a species of the pea, and is grown very extensively in Western Oregon and Washington. Especially in the Willamette Valley and on the Oregon Coast. It furnishes an abundance of excellent feed, either green or cut and cured for hay. The seed should be mixed with an equal weight of some variety of wheat, oats or rye having a stiff straw, and the mixture sown at the rate of two bushels per acre. Vetches weigh 70 pounds per bushel. Sow in the Fall or early Spring.

#### Per lb., postpald, 15c; 100 lbs., \$3.65.

Sand, or Winter Vetches.--(Vicia Villosa). This variety thrives on poor, arid, sandy soils. It is

sown either in the Fall or early Spring, and is generally mixed with rye, which serves to support the plants. It grows to a height of three or four feet, and can be cut twice; first, as soon as the bloom appears, and afterward for seed. The plant is perfectly hardy and makes a very nutritious food. Per lb., postpaid, 25c; 100 lbs., \$12.00.

White Spring, or Pearl Vetch.-- Equally as valuable as the common vetch for Spring planting for forage or hay crop, soiling or for grain. **Per Ib., postpaid, 20c; 100 lbs., \$5.00.** 

#### Flax Seed

We have a splendid lot of selected recleaned Western-grown Flax, new crop, large plump seed. Per lb., postpald, 25c; 100 lbs., \$6.00.

THE varieties here offered represent the best selections and are highly recommended. They are best drilled in — using 3 to 8 lbs. per acre, depend-ing on variety and condition. Plant in the late Spring after the ground is warm. Cultivate often, throwing the earth toward the plants.

#### FETERITA

This is the most recent of the non-saccharine sorghums to command the attention of "dry farmers" on account of its wonderful yield and drouth resistant qualities, being 20 to 40 days earlier than Kaffir corn and has given immense crops in the driest seasons without having received a drop of rain. Makes splendid fodder as well as giving a good grain yield. Try Feterita Per lb., postpald, 25c; 100 lbs., \$10.00.

## Milo Maize

This is one of the sorghums similar to Kaffir corn. Grows erect, with thick, close-jointed stalk. Height, 4 to 7 feet. Heads are very large, giving a heavy grain yield; is drouth resistant, and suc-ceeds on alkali soil. Plant late when ground is warm, 3 to 6 pounds per acre.

Per lb., postpaid, 20c; 100 lbs., \$5.00. **Kaffir Corn** 

An excellent fodder plant. Grows four to five feet high; upright stalk, with numerous large leaves. Greatly relished by cattle and horses. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. It does best sown in drills three feet apart, six to eight pounds per acre. Per lb., postpaid, 15c; 10 lbs., 55c; 100 lbs., \$7.00

Egyptian Corn Also called Jerusalem Corn or Dhoura.

One of the non-saccharine sorghums, requiring the same growing conditions. Succeeds well in dry sections. Producing small heads on side shoots up to eight on a stalk, the seed is larger than Kaffir corn. Yield is heavy. Makes fine chicken feed. Plant three pounds per acre.

WHITE, Per lb., postpaid, 15c; 100 lbs., \$4.50. RED, Per lb., postpaid, 15c; 100 lbs., \$4.50.

#### Broom Corn—(Dwarf Evergreen)

Grows from 4 to 5 feet high and makes straw of finest quality, being almost, if not entirely free from crooked brush.

Per Ib., postpald, 20c; 100 lbs., \$8.00.

#### **Field Peas**

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog-feed and are quite fattening. Sow, if alone, 120 pounds to the acre; if with other grain, 60 pounds.

#### White Canadian

A leading kind; seed almost white; a heavy cropper. Per lb., postapid, 20c; 100 lbs., \$3.75.

#### **Blue Prussian**

Very much like the above, except in color. This variety is largely sold dried for soup peas. Per lb., postpaid, 20c; 100 lbs., \$4.00.

#### **Swiss**

A three-cornered pea; excellent for cooking purposes. Vines small. One peculiarity of these peas is that they are never infested with bugs.

Per Ib., postpaid, 20c; 10 lbs., 90c.

#### Lentils

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons A leguminous and are used largely for soups. The leafy stalks make good forage.

Per Ib., postpaid, 20c; 10 lbs., 90c; 100 lbs., \$7.50

# **GRAIN AND FIELD SEEDS**-Continued "Club Hybrids"

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#### Sunflower

Mammoth Russian .- The largest and most productive variety. It makes one of the very best of foods for poultry; a great egg producer. Per ¼ lb., 10c; lb., postpald, 25c; 10 lbs., 90c.

#### Wild Rice-Zizania Aquatica. For Planting In Duck Ponds.

And around hunting grounds to furnish food for wild fowl, ducks, geese, etc. Seed can be sown on the borders of lakes, ponds and small streams and grows very rapidly in one to four feet of water, attracting all of these wild birds from September on. It also purifies the water and affords a refuge for the small fry from the large fish. Fresh seed supplied in season. Write for information and prices.

#### Rye, For Seed

Planted extensively in both Spring and Fall. Per lb., postpaid, 15c; 100 lbs., \$2.10.

#### Sugar Cane or Sorghum

Early Amber; a valuable crop to grow for fodder ensilage, as it furnishes an immense tonnage the acre. When fed down while young it makes or to the acre. a rapid second growth.

Price, postpaid, per lb., 20c; 100 lbs., \$6.25.

SPELT-See Emmer, page 47

# SEED WHEAT

WHEN ready to buy any variety of Seed Wheat, write us for quotations on quantity wanted or send in your order and we will give full value at lowest market price.

#### **Club Hybrids**

HE efforts of the Washington State College of Agriculture to produce a hardy Winter wheat resulted in the development of a number of valuable hybrids - crosses of club with the best Winter variety - that far outyield the best of the older sorts, stand up well, do not shatter out and are extremely hardy. We offer choice seed stock of both red and white selections. They are specially valuable for feeding.

- **RED HYBRID NO. 123.** Cross between Winter Fife, red, and Little Club, sometimes called "Red Club"— quoting from report of Mr. Girard Clark, of Albion—(Bulletin No. 89). "**No. 123** made 50 bu. per acre — testing 63 lbs.,— I have experimented with the best wheats known to this section, but have never secured as good results as from the hybrids. The yield is better, of a superior quality and grain does not shatter out." Per Ib., Postbald, 15c: 100 lbs. \$2,50 Per lb., Postpald, 15c; 100 lbs., \$2.50.
- WHITE HYBRID NO. 143.— Cross between White Track and Little Club made the excellent record of 51 1/2 bu. per acre at the college trials. The immense, branching heads of these hybrids give the big yield as they can carry so much more grain than the standard sorts.

Per lb., postpald, 15c; 100 lbs., \$2.50 **Standard Varieties of Wheat** 

We can supply the following varieties which are Choice reextensively grown in the Northwest. cleaned seed. Write for samples and prices. **Blue Stem Red Fife** 

Little Club **Red Russlan** Turkey Red Forty-Fold. **Red Chaff** 

#### Rape, Dwarf Essex True, Pure Seed.

One of the best forage plants, producing immense quantities of green feed when grass and other crops are dried up. Highly recommended by Prof. Shaw and other eminent authorities. Has yielded ten tons of green forage per acre with a food value double that of green clover. Excellent pasture for all stock, and fine green feed for chickens. Thrives on all soils and is ready for use in six to eight weeks from time of sowing. Also valuable for plowing under. Sow same as turnips from May until September, or sow with grain. Use four pounds per acre in drills, eight pounds broadcast.

Price, postpaid, lb., 25c. Frt. or Exp., 10 lbs. \$1.00; 100 lbs., \$9.00.

#### Salt Bush

This wonderful forage plant will grow freely in arid and alkali lands that will produce no other vegetation, yielding a marvelously liberal foliage, which is eagerly eaten by all kinds of stock. Single plants grown on the poorest alkali ground have reached a diameter of 16 feet in one season. One pound of seed will plant an acre if evenly scattered over the surface. The seed should be mixed with ten times its weight of sand or ashes to facilitate its distribution. Sow the seed in the Fall or Spring (Winter sowing is not desirable), before a rain, if possible, on well pulverized soil, and cover it lightly (about one-eighth of an inch) with a light harrow or brush. If deisred, plants may be grown and transplanted when two or three inches high, six to seven feet apart. If the weather is dry when transplanting, supply a little water to each plant. Pkt., 5c; oz.,  $10c; \frac{1}{2}$  lb., 40c; lb., \$1.25, postpaid. Special price in quantity.

A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill be sure you get a CLIPPER. Special Catalog FREE



## **REFERENCE TABLES**

Quantity of Seeds to produce a given number of plants and to sow an acre

Quantity per acre Artichoke, 1 oz. to 500 plants. 6 oz. Asparagus, 1 oz. to 800 plants. 1 lb. Asparagus Roots..... 7500 

drill ..... 1 bu. Pole, 1 lb. to 100 hills ..... ½ bu. Beet, Garden, 1 oz. to 100 ft. drill .....6 to 7 lbs.

Mangel, 1 oz. to 100 ft. of .... 5 lbs.

Brussels Sprouts, 1 oz. to 2,000

Carrot, 1/2 oz. to 100 ft. drill.... 3 lbs. Cauliflower, 1 oz. to 3,000

plants...... 3 to 4 oz. Celery, 1 oz to 5,000 plants.... 4 oz. Clover, Alsike and White. .8 to 10 lbs. Alfalfa.....15 to 20 lbs. Crimson Trefoil....10 to 15 lbs. Red.....10 to 15 lbs. Collards, 1 oz. to 2,000 plants. . 4 oz. Corn, Pop (shelled).....8 to 10 lbs. Sweet or Field, hills...12 to 15 lbs. For soiling drills...... 3 bu. Cress, ¾ oz. to 100 ft. drill.... 1 lb. Cucumber, 1 oz. to 100 hills. 2 to 3 lbs. Egg Plant, 1 oz. to 2,000 plants. 4 oz. Grass-Kentucky Blue, for pas-

ture.....1 to 2 bu. Kentucky Blue for lawns.. 100 lbs. Meadow Ference Meadow Fescue..... 1 bu. Mixed Lawn..... 5 to 6 bu. Red Top, Chaff.....1 to 2 bu.

Quantity per acre. Red Top, solid seed....10 to 15 lbs. Timothy.....10 to 15 lbs. Orchard, Perennial Rye. 1 to 2 bu. Wood Meadow..... 1 bu. Horseradish Roots. 15,000 to 25,000. Kale, 1 oz. to 2,000 plants..... 4 oz. Kaffir Corn, in drills..... 6 to 10 lbs Kohl Rabi, 1 oz. to 2,000 plants. 4 oz. Leek, 1 oz. to 100 ft. of drill..... 4 lbs. Lettuce, 1 oz. to 150 ft. drill. . 3 lbs. Millet—For Seed..... 20 lbs. For Hay..... Melon, Musk, 2 oz. to 100 hills 30 lbs.

Water, 4 oz. to 100 hills... 3 to 4 lbs. .....2 to 3 bu. Oats..... Okra, 1 oz. to 100 ft. of drill. . 8 lbs. Onion Seed, for sets.....60 to 85 lbs. 1 oz. to 150 ft. drill...... 3 to 4 lbs. Onion Sets, 1 qt. to 40 ft. drill. . 8 bu. Parsnips, 1 oz. to 150 ft. drill. . 3 lbs. 

.....1 to 2 bu. Pepper, 1 oz. to 1,000 plants. 2 lbs. Pumpkin, ½ lb. to 100 hills

....3 to 5 lbs. . . . . . . . . . . . . . . . Radish, 1 oz. to 100 ft. drill. . 10 lbs. Rape..... 3 to 5 lbs. Rye.....1  $\frac{1}{2}$  to 2 bu. Salsify, 1 oz. to 100 ft. drill. . 6 to 8 lbs. Spinach, 1 oz. to 100 ft. drill

..... 8 to 10 lbs. Sugar Cane, in drills..... 10 lbs. Sunflower..... 8 lbs. Squash—Summer, 4 oz. to 100

hills ..... .... 3 lbs. Winter, 8 oz. to 100 hills... 4 lbs. Tomato, 1 oz. to 2,000 plants. 4 oz. Tobacco, 1 oz. to 4,000 plants. 3 oz. Turnip, 1 oz. to 150 ft. drill. 2 to 3 lbs.

	Quantity per acre
Vetches.	$\dots 1 \frac{1}{2}$ to 2 bu.
$\mathbf{With}$	grain 1 bu.
Wheat	$\dots 1\frac{1}{2}$ to 2 bu.

## WEIGHTS OF VARIOUS ARTICLES

ARTICLES		
Per	bu	shel
Barley	48	lbs.
Beans	60	lbs.
Buckwheat	48	lbs.
Blue Grees		
Kentucky	14	lbs.
English	<b>24</b>	lbs.
English Canary Seed	60	lbs.
Cheat Clover Seed Corn, Shelled	<b>34</b>	lbs.
Clover Seed	60	lbs.
Corn, Shelled	56	l bs.
Charcoal	<b>22</b>	lbs.
Charcoal Emmer	40	lbs.
Flax Seed Grass Seeds (unless	56	lbs.
Grass Seeds (unless	s	
otherwise stated) Hemp Seed	14	lbs.
Hemp Seed	44	
Hungarian Millet	48	
Lawn Grass	20	lbs.
Meadow Fescue	<b>24</b>	lbs.
Millet	50	
Oats	32	
Onion Sets	<b>32</b>	
Orchard Grass	14	
Peach Pits	48	
Peas. Smooth	60	lbs.
Peas, Wrinkled	56	lbs.
Perennial Rye	20	lbs.
Potatoes	60	lbs.
Rape	60	lbs.
Rape Rye	56	lbs.
Red Top	14	lbs.
Red Top, Solid Seed	<b>42</b>	lbs.
Timothy	45	lbs.
Timothy Vetches	70	lbs.
Wheat	60	lbs.
	_	

#### English and German Names of Grains and Field Seeds.

ENGLISH	GERMAN	ENGLISH	GERMAN
Wheat	Weizen	Red Clover	Rother Klee
Oats	Hafer	White Clover	Weiszer Klee
Rye	Roggen	Alfalfa	Lucerne
Barley	Gerste	Timothy	Timotheus
Buckwheat	Buckweizen	Orchard Grass	Brautgras
Emmer	Emmer	Red Top Grass	Weisenfuchschwanz
Cheat	Betrug	English Rye Grass	Englische Raygras
Flax	Flachs	Italian Rye Grass	Italienische Ray Gras
Lentils	Linse	Millet	Hirse
Vetch, or Tares	Wicke	Blue Grass	Blaugras
Speltz	Spelz		

#### Reports on Shadeland Oats – See Pages 48-49-"Climax"-115 Bushels per Acre on Dry Land

Thorp, Wash., 2-7-'13.

W. D. BRUTON.

Gentlemen: - The 100-lb. Shadeland Climax I got from you last year was sown on dry land, received no water and yielded 115 bu. of very fine oats.

Chehalis, Wn., 11-6-'13. - I bought 360 lbs. of Shadeland Gentlemen:-Challenge Oats from you this Spring. I planted them on some new land which had never been cropped before. They yielded about 90 bu. W. E. SHAFFER. per acre.

#### From Missouri-100 bushels per acre

Mr. Geo. Scott, Anabel, Mo., Macon Co., writes that from each pound of Climax and Challenge Oats sent him, he threshed one bushel of seed oats. The Climax was harvested two weeks earlier than the Challenge. The growth and yield was the wonder of the neighborhood. Both varieties yielded at the same rate, average of 100 bushel per acre.

**TA** "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill BE SURE YOU GET A "CLIPPER," the only fanning mill with the "VERTICAL BLAST." WRITE FOR SPECIAL CATALOG.

PORTLAND SEED COMPANY'S



The Base is Bone Meal and Tankage—No Cheap Filler. Every Pound is Good Fertilizer

IAMOND QUALITY Fertilizers are complete fertilizers of the highest grade and concentration, no inferior ingredients or cheap fillers are used in their prepara-tion. Bone Meal and Tankage forming the base to which is added the necessary Potash, Nitrogen and Phosphoric Acid. Each package is marked plainly, showing >SEED < MPANY the percentage of available plant food, as required.

SPECIAL FERTILIZER BOOKLET giving complete analysis and prices of the different fertilizers which we can supply, together with full information for their application, will be sent on request. This book is of great value to all interested in fertilizers.

Applied In quantities of 1000 lbs. to a ton per acre, our fertilizers, with intelligent culture will Applied in quantities of 1000 his. to a ton per arce, our fertilizers, with intelligent cutture with sustain and gradually improve the soil and increase the yield and quality of the product, even though the crop be entirely removed and no other manuring done. The roots, vines, stubble and whatever of weeds or waste there is, all assist in providing the necessary humus. A greater amount is often used to advantage by market gardeners. Complete instructions will be found in our Fertilizer Booklet, sent free. If there is any special information you require, write us; your inquiries will have our prompt and careful attention and our experience may help you.

Being the largest dealers, we carry the most complete stock of fertilizers and fertilizing materials in the Northwest, and having installed modern machinery for regrinding and mixing our "Diamond Quality" Fertilizers, we can make immediate delivery in any quantity, ground to a fineness and blended to a mechani-cal perfection that make them of superior excellence. Fertilizers that are machine mixed and fined are more thoroughly and evenly blended, are more readily available and give uniformly better results than when mixed by hand.

#### No. 1 – General Fertilizer

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An all-round fertilizer, which can be used on any crop, but is especially adapted for grain and general farm crops. Analysis: Nitrogen, 2 to 3 per cent; phosphoric acid, 7 to 8 per cent; potash, 6 per cent. Price: 10 lbs., 40c; 100 lbs., \$1.90; per ton, \$36.00

#### No. 4-Fruit and Strawberry

This fertilizer is also used for blackberries, raspberries, etc. We sell large quantities for the famous Hood River strawberries. We sell large quantities for growing Analysis: Nitrogen, 21/2 to 3 per cent; phosphoric acid, 7 to 81/2 per cent; potash, 10 per cent.

Price: 10 lbs., 40c; 100 lbs., \$2.10; ton, \$40.00.

#### No. 5 – Odorless Lawn Dressing

Our No. 5 Diamond Lawn Fertilizer promotes a vigorous healthy growth giving the desired dark rich green appearance, can be used at the time the seed is planted and later as a top dressing. One hundred pounds is sufficient for an ordinary city lot, and is far more effective and less objectionable than stable manure. Remember, it contains no weed seeds. When used as a top dressing it is best to make several small applications about two weeks apart.

Price: 10 lbs., 50c; 25 lbs., 75c; 50-lb. sack, \$1.25; 100 lbs., \$2.25; ton, \$40.00.

#### No. 10-Special Hop and Onion

A fertilizer made especially for hops; very rich in potash, and when used freely in hop yards has been known to double the yield and improve the quality of the hops. Be sure that you get "Diamond Brand." Analysis: Nitrogen, 2½ to 3½ per cent; phosphoric acid, 8 to 10 per cent; potash, 12 per cent.

Price: 100 lbs., \$2.10; 500 lbs., \$10.25; ton, \$40.00.

#### Nitrate of Soda

For immediate results Nitrate of Soda is the very best for stimulating and forcing the growth of plants or any other crop

Per lb., 5c; 100 lbs., \$3.25; ton., \$62.00.

#### Land Plaster, or Gypsum

Made from pure gypsum, absolutely free from clay or other foreign matter. This is especially valuable for clover crops.

10 lbs., 25c; 100-lb. sack, 75c; ton, \$12.00.

#### Superphosphate

This is a concentrated form of phosphoric acid, and it is actually the cheapest form in which to buy phosphoric acid. Our present stock contains 17 to 18 per cent available phosphoric acid.

Price: per lb., 5c; 100 lbs., \$1.40; ton \$26.00.

#### **Ground Bone**—Pure

Pure Ground Bone, fine ground, is one of the best fertilizers. This is the only grade of Ground Bone we are now manufacturing, and is all pure bone, reduced by improved machinery to an even fineness - nothing is added, and is free from any adulterant. This is a very valuable enricher of the soil, and one of the most economical at present prices.

Price: 5 lbs., 25c; 10 lbs., 35c; 100 lbs., \$1.75.; ton, \$33.00.

#### **Blood Meal**

Pure Blood, cooked, dried and finely ground, a quick-acting fertilizer, analyzing very high in ef-fective nitrogen; in fact, the nitrogen of Dried Blood is one of the most effective forms of organic nitro-gen known. This also carries some phosphorous; is a strong fertilizer, a little going a long way. Price: 5 lbs., 30c; 10 lbs., 50c; 100-lb. sack, \$3.50.

#### **Bone Tankage**

Ground meat scraps and bone, dessicated in a vacuum, is very rich in phosphoric acid and nitrogen. Price: \$1.90; per 100-lb. sack; \$37.00 per ton.

#### **Fish Guano**

Fish scraps, cooked, dried and ground, is a strong fertilizer, high in nitrogen, carrying considerable phosphorous and used largely by vegetable growers. We do not recommend this for lawns or city use, as odor is objectionable.

#### Price: 100 lbs., \$2.50; ton, \$45.00

A 100-pound bag of high grade commercial fertilizer will contain omparative Values more soluble and available plant food than 4,000 pounds (two tons) of stable manure of average quality. How much easier and cleaner to handle one 100-pound bag than 2 tons of manure, and there are no weed seeds to worry over.

**NOTE**—AS FERTILIZERS ARE SOLD ON A SMALL MARGIN, PRICES ARE SUBJECT TO MARKET CHANGES, but you will always get FULL VALUE for your money

# **FERTILIZERS**-Continued



#### **One of the Most Important Fertilizing Elements**

**POTASH** is found in large proportions in all plants. It is essential to the production of starch, fiber and the growing parts of the plant; without it there cannot be full development of plant or seed. In com-bination with Nitrogen and Phosphoric Acid, Potash contributes to the full and perfect development of plants.

Being selling agents for the GERMAN KALI WORKS, whose products are known and used throughout the entire world, we receive direct importations and offer the following in original packages, or can supply any quantity, large or small, at lowest price.

**Muriate of Potash** 

MURIATE OF POTASH contains a larger percentage of Potash than other commercial forms and is, therefore, cheaper where it can be safely used, but owing to the Chlorine contained, is not best for some crops unless applied a few months previous to planting, which allows the Chlorine to leach out while all of Potash is retained until taken up by the plants. the Price: Lb., 5c; 100 lbs., \$3.25; sack, 224 lbs., \$6.50; ton, \$55.00. **MURIATE OF POTASH** 

#### Sulphate of Potash

SULPHATE OF POTASH contains no Chlorine, can be used on any crop requiring Potash and is especially adapted for mixtures, being in the form of a dry powder. It is also the best form of Potash for heavy soils and is always used in our "Diamond Mixed" Fertilizers. Price: Lb., 5c; 100 lbs., \$3.60; sack, 224 lbs., \$7.50; ton, \$63.00. SULPHATE OF POTASH

Kainit

KAINIT is another potash salt containing chlorine, and is especially valuable for use on sandy soils, not only for its fertilizing qualities, but also for its peculiar property of retaining moisture, and its power of destroying insect life and preventing plant diseases. KAINIT Price: Lb., 3c; 100 lbs., \$1.50; sack, 224 lbs., \$2.75; ton, \$23.00.

The valuable literature of the German Kali Works will be sent FREE on application. If you are not informed on the subjects treated it will pay you to give this your immediate attention.

Our fertilizers contain generous supplies of vital plant food. Being highly concentrated and readily available, small quantities only are needed for the production of the finest crops. THEY ARE QUICK IN ACTION, RELIABLE AND ECONOMICAL.

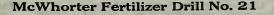
## DIAMOND PLANT FOOD

For Ferns, Palms and House Plants. Clean, Odorless, **Highly Concentrated** 

A complete, highly concentrated, powerful fertilizer, clean and odorless, wonderfully invigorating to all plants; producing luxuriant foliage and larger and more brilliant flowers. A 25c package will feed a dozen large plants a whole year. Special instructions on each package.

Price: 1/2 lb. pkg., 15c; by mail, 25c; 1-lb. pkg., 25c; by mail, 40c.





For the Practical, Superior Distribution of Commercial Fertilizers - Simple in Construction, Easily Understood and Effective in Operation.

This machine needs no defense or praise from us. Wherever known, it is pronounced the best. Has a force feed without friction; does not require that degree of dryness in the fertilizer necessary to all other distributors we have seen; is so arranged that the fertilizer can be applied in any manner that may be desired, as the operator has perfect control of the spread and division of same, any change for that purpose requiring only a few seconds.

It will distribute the fertilizer in one or more furrows beside the growing crop or broadcast to any ex-tent up to a uniform spread of over two feet, without removing or adding any part or loosening a bolt, and in any quantity from a few pounds up to forty or more pounds to the hundred yards of row, or from 200 pounds to over a ton to the acre. We call special attention to this ability to **spread** the fertilizer with this machine. It is a highly important feature and will be appreciated by the thinking farmer. A decidedly wrong thing is to apply the strong fertilizers of the present day without sufficiently spreading and incor-porating them with the soil. Shipping weight, 61 pounds. Price, complete, \$13.00. Price, complete, \$13.00.

FARMOGERM is a practical success. A \$2.00 package used on a leguminous crop will produce as much nitrogen as 8 tons of manure. See Page 51



PORTLAND SEED COMPANY'S

#### **JOKS** Standard text and reference works by recognized authorities. Special orders for books not listed will have prompt attention. Books are the inspiration, the authoritative guide, that enables you to command success, and you should have the standard references on the subjects in which you are interested. Note: C indicates cloth; P, paper cover All books postpaid at following prices **Binding** Price **Binding** Price Note: C indicates cloth; P, paper cover Bind Fruit Harvesting, StorIng, Marketing, Waugh, 224 pages, 5x7 ½ in......C Fungi and Fungicides, Weed, 228 pages, 5x7 ½ in.....C Gardening for Pleasure, Henderson, 404 pages, 5x7 ½ in....C Gardening for Profit, Henderson, 376 pages, 5x7 ½ in....C Gardening for Young and Old, Harris, 191 pages, 5x7 ½ in....C Garden Making, Bailey, 417 pages, 5x7 ½ in....C Ginseng, Kains, 144 pages, 5x7 ½ in...C Grape Culturist, The, Fuller, 282 pages 5x7 ½ in....C Agriculture, The Principles of, Bailey, 336 pages, 5x7 ½ in.....C \$1.45 1.10 Agriculture, Principles of, through the school and home gardens. Stebbin.... C 1.10 1.65The Book of, Coburn, 324 1.652.201.65.60 Alfaita Farming in Antereet, in C pages, 5x8 in. Apple Culture, Field Notes on, Bailey, 88 pages, 5x7 ½ in. Apple Orchard, The American, Waugh, 214 pages, 5x7 ½ in. Asparagus, Hexamer, 166 pages, 5x7 ½ 1.10 2.201.70 .85.60 1.151.60 Asparagus, Hexamer, 166 pages, 5x7 ½ in.....C Barn Plans and Outbuildings, O. J. Co., 385 pages, 5x7 ½ in.....C Basket Making With Raffia, Morse, 30 pages, 5x7 in.....P Beautiful Flower Garden, The, Mat-thews, 186 pages, 5x7 ½ in.....P Blackberry and Raspberry Culture, Littooy, 48 pages, 3 ½x6 in., new edition. P Bulbs and Tuberous-Rooted Plants, Allen, 312 pages, 5x7 in.....C Bush Fruits, Card, 537 pages, 5x7½ in....P Cabbages and Cauliflowers, Broccoll, etc., Gregory, 93 pages, 5x7 ½ in....P Cabbages and Cauliflower, Etc, Allen 125 pages, 5x7 in.....C .55 1.60 1.10 2.50.25 1.60 Greenhouse Management, Taft, 382 pages, 5x7 ½ in. Hedges, Windbreaks, Etc., Powell, 140 pages, 5x7 ½ in. Home Fioriculture, 300 pages, 5x7 in. Homes for Home-Builders, King, 251 pages, 5x7 ½ in. Horticulturist's Rule Book. How to Choose a Farm, Hunt, 412 pages, 5 ½x7 ½ in. How to Pian the Home Grounds, Par-sons, 249 pages, 5x8 in. Injurious Insects of the Farm and Garden, Treat, 296 pages, 5x7 ½ in... Insects Injurious to Fruits, Saunders, 436 pages, 5x8 in. .50 1.65.40 .60 C 1.101.70 1.70 .....C 1.10 .90 .40 C 2.00 .60 C 1.10 2.00 . . C 1.60 .30 A36 pages, 5x8 in. Insects and Insecticides, Weed, 334 pages, 5x7 ½ in. Irrigation for the Farm, Garden and Orchard, Stewart, 276 pages, 5x7 ½ in. Land Draining, Miles, 199 pages, 5x7 ½ Chrysanthemum, The, Herrington, 160 $\mathbf{C}$ 2.25Chrysanthemuli, 1 M, 1 M, C pages, 5x8 in....C Clovers and How to Grow Them, Shaw, 349 pages, 5x7 ½ in...C Cranberry Culture, White, 131 pages, 5x7 ½ in...C Daffodils-Narcissus, Kirby, 235 pages, 5x7 ½ in...C .60 C 1.601.10C 1.10 1.10 $\mathbf{C}$ 1.10 In. Landscape Beautiful, The, Waugh, 336 1.10 C 2.151.10 1.60 C .60 Farm Appliances, Martin, 192 pages, 5x7 in. C Farm Book, New American, Allen, 540 pages, 5x7 ½ in. C Farmstead, The, Roberts, 350 pages, 5x7 ½ in. C Farm Conveniences, 256 pages, 5x7 ½ in. C $\mathbf{C}$ .85 .55 C 1.10 2.25 Use Them, Sempers, 218 pages, 5x7 1/2 .50 1.70in. e, The Bommer Method of Manur Manure, The Bommer Method of Making, 86 pages, 6x9 in.....P Market Gardening and Farm Notes, Landreth, 215 pages, 5x7 ½ in.....C Money in the Garden, Quinn, 268 pages, 5x7 ½ in.....C Mushroom Culture and Pure Culture, Spawn, 33 pages, 5x8 in.....P Mushrooms, How to Grow Them, Fal-coner, 169 pages, 5x7 ½ in.....P 1.10 .30 1.10 1.10 .10 1.10 1.65.35

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- Fertilizers, Gregory, 137 pages, 5 ½x7 ½ in. Fertilizers, Voorhees, 335 pages, 5x8 in. C First Book of Farming, The, Goodrich, 259 pages, 5x7 ½ in. Florentiure, Practical, Henderson, 325 pages, 5x7 ½ in. Florentiure, Practical, Henderson, 325 pages, 5x7 ½ in. C Flower Garden, The, Ida D. Bennett, 282 pages, 5x7 ½ in. C Forage Crops, Other Than Grasses, Shaw, 287 pages, 5x7 ½ in. C Foreing Book, The, Bailey, 266 pages, 5x8 in. Forestry, Practical, Fuller, 299 pages, C Fruit Garden, Barry's, 516 pages, 5x7 ½ in. C Fruit Grower, The Practical, Maynard, 128 pages, 5x7 in. C Fruit Growing, The Principles of, Bai-ley, 516 pages, 5x7 ½ in. C 1.60
- 1.65.60
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- $5x7 \frac{1}{2}$  in. **b**  $7x7 \frac{1}{2}$  in. **c**  $7x7 \frac{1}{2}$  in. **c** Onion Ρ .30 Onion .60 Peach **Play and Profit in My Garden**, Roe 349 pages, 5x7 ½ in. **Potato Culture, A B C of,** Terry, 318 pages, 4½x6 in. **Potato, The,** Frazer, 185 pages, 5x7 ½ 1.10Ć 1.15.50

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- in. ..., Pages, Jackins, Pages, Jackins, P Propagation of Plants, Fuller, 349 pages, 5x7 ½ in. .... C Pruning Book, The, Balley, 545 pages, 5x7 ½ in. .... C Raspherry and Blackberry Culture, New, Littooy, 48 pages, 3 ½x6 in. .... P  $.85 \\ .30$ 1.60 1.65
- .40

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## **NEW BOOKS**-Continued

Note-C indicates cloth; P, paper cover. Binding Price.

#### THE ROSE BOOK, (New 1913)

By H. H. Thomas and Walter Easlea.

A complete guide for amateur rosegrowers, is the latest, most beautiful and complete work that the English have given us; lists and describes the new roses, tells how to grow them, 64 beautiful half-tone engravings, 8 pages of superb color plates; if you love roses, you should have this book — An ideal gift book - 278 pages, 5 1/2x8 1/4, \$2.15, postpaid.

Rhubarb	Culture,	The	New	Morse,

- .50 130 pages, 5x7 ½ in..... Rose, The Book of the, Foster-Melliar, 356 pages, 5x7 ½ in.....C
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you in every way possible, and our experience is at your service. **CULTURE.**— Cultural directions are printed on the back of nearly all packets. Flowers usually succeed best in a sandy loam, made rich with well-rotted manure, which should be made fine and thoroughly mixed with the soil. A soil thus prepared will remain moist and loose, so that flower seeds, which are generally small and delicate, will germinate and grow with vigor.

After the plants are up they require plenty of air and moisture, but they must not be too wet or they will "damp off." When large enough to transplant, put them in boxes or pots, giving them plenty of room, then when the ground is warm enough to put them outside, each plant will have a nice clump of roots. But if they are left in the seed bed and are close together, they will be weak and will not thrive.

A common mistake with flower, as well as other seeds, is planting too deep. A good rule is to plant the same depth as the thickness of the seed, and always press the soil down firmly, as this helps the seed to secure a firm hold and also retains the moisture.

A hotbed or cold frame is very convenient to start seeds in, as the temperature and moisture can be so regulated as to make their germination and rapid growth more certain. Most seeds do well if sown in boxes in a sunny window in the house.

Plants are usually ready to be transplanted when they have made a growth of two inches.

#### **INFORMATION THAT WILL AID IN SELECTION OF FLOWERS.**

**Annuals** bloom and ripen the first year and then they perish. Many annuals in warm climates, or when taken in, or protected during Winter, become perennial, with short lives.

**Biennials** do not generally flower the first year, and are in their perfection the second year.

**Perennials** flower several years in succession. **Hardy Annuals, Biennials and Perennials** can be sown in the open ground early in the Spring if desired, and Hardy Biennials and Perennials do not require any protection in Winter. Half-Hardy Annuals, Biennials and Peren-

**nials** should not be sown in open ground until settled warm weather, though they can be sown in the house, if desired, early, and afterwards transplanted. The two latter need to be protected in Winter, or carried over until Spring in cold frames or greenhouses.

## Asters

As Fall-blooming annuals, Asters have no superior, and many of the new varieties rival the chrysanthemum in size and beauty. We offer a select collection of the choicest varieties and all of our seed is fresh from the most expert growers. Asters should have rich soil and abundant moisture. They are halfhardy annuals. Fine Plants in Season, see Plant Department.

### **Finest New Asters**

#### Lavender Gem

This beautiful new aster of the comet type is an exquisite shade of true lavender, beyond question the finest yet produced. Is free flowering, erect habit, medium early. Every florist should grow this aster. **Pkt.** 15c; ½ oz., \$1.00.

**Pink Gem** 

Identical with the lavender type, except in color, which is a bright pink.Pkt., 15c; ½ oz., \$1.00.

#### New "Crego Giant" Aster

The "Giant Crego" is distinct in every way, and its magnificent flowers, often 6 inches in diameter, are fully equal to chrysanthemums. They have rare beauty of form and brilliant coloring, are very vigorous, and free flowering; blooms are borne on long stems. White, Shell Pink, Rose, Purple. Pkt., 15c ½ oz., \$1.00.

Annual and Perennial Bedding Plants—Page 79.



#### ASTERS - Continued

#### White Gem

A beautiful white aster of the new "Gem" type - same as lavender and pink Gem.

Pkt., 15c; 1/8 oz., \$1.00.

**Hercules** White

A splendid new half dwarf white, with immense pure white blooms of great beauty. Be sure to give Pkt., 25c; 1/8 oz., \$2.00. this novelty a trial.

#### "Mikado"

Another new type of Aster of great merit. A favorite with florists. Has very long, narrow petals, straight at the outside, but toward the center they cross and recross in splendid confusion, giving the bloom a beautiful, fluffy fullness. Mikado is very vigorous, with strong branching habit, producing a blossom on every shoot.

#### Pink, White, Pkt., 15c; 1/8 oz., \$1.00. Daybreak

Flowers are full, large and round, borne freely on long stems. Color a dainty shell pink. Very early. Height, 18 inches. Pkt., 10c; ½ oz., 75c.

#### Purity

Same as Daybreak, excepting color, which is a pure, glistening white. Pkt., 15c; 1/8 oz., 75c.

#### **Imperial Lavender**

Of the same type as Daybreak, Purity and Im-perial Yellow. Color a lovely light lavender. Up-Pkt., 10c; 1/8 oz., 75c. right, free bloomer.

#### **Imperial Yellow**

Handsome flowers of a light lemon yellow: a new color in asters. Pkt., 10c; ½ oz., 75c.

#### Queen of the Market

Best early Aster, of graceful spreading habit. Two weeks ahead of other varieties.

White, Light Blue, Scarlet, Dark Blue. Mixed Pkt., 10c; ¼ oz., 40c.

**Giant Comet** 

One of the handsomest of the tall growing sorts; flowers large and beautiful; petals long and twisted. Rose, Crimson, Light Blue, White or Mixed.

Pkt., 10c; ¼ oz., 50c.

#### Semple's Late Branching

A magnificent strain; flowers large, beautiful, double, and borne on long stems. White, Rose, Crimson, Blue or Mixed.

Pkt., 10c; ¼ oz., 35c.

#### **Hardy Perennial Asters**

Michaelmas Daisy

Handsome flowers of easy culture, that appear at a time when flowers are scarce. A large clump when in bloom is a treat to the eye.

Large Flowering Mixed, pkt. 10c.

#### ASTER PLANTS See Plant Department

#### Acroclinium-Everlasting

Elegant annual, everlasting, producing beautiful daisy-like flowers, resembling the Rhodanthe. Fine for Winter bouquets. Gather them partially opened and dry in the shade. Height ten to fifteen inches. Mixed, all colors, pkt., 5c.

#### Ageratum

## Mexicanum Nanum,

Fine for bouquets and useful for beds, borders and pot plants. The flowers are graceful tufts of fine petals that remain fresh a long time after being cut, The plant blooms all Summer. Half hardy annual six to eighteen inches high. Plants Light Blue, White or Mixed. Plants in season.

Pkt., 5c; ¼ oz., 15c.



#### Pink Gem

#### Agrostemma-Coronaria

Strikingly beautiful for beds, ribbons and borders. Its graceful, pink-like flowers remain fresh a long time after being cut, and are very handsome in bouquets. Thrives in any soil. Perennial.

#### Pkt., 5c.

#### Ammobium

One of the hardiest everlastings. The flowers are not large, but beautiful in form, and pure white. Very desirable for Winter bouquets. An easily grown annual. Pkt., 5c.

#### Alyssum

Every garden should have plenty of Sweet Alyssum; its small, white flowers, borne in great profusion, are delicately fragrant and valuable for cutting; it is a good basket and pot plant, and valuable for carpet bedding. In the border sow thickly so as to make a mass. It is desirable to sow the seeds early in Spring or even the previous Autumn. Hardy annual. Plants in season.

Maritimum. Pkt., 5c; oz., 30c. Sweet. Little Gem. Pkt., 5c; oz., 50c. Maritimum. Procumbens. Of trailing habit; profuse bloomer. Pkt., 10c; ¼ oz., 20c; Saxatile. Perennial.

Yellow flowers. Pkt., 5c; ¼ oz., 20c.

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Our warm Summers suit admirably the varieties of Amarantus cultivated for ornament. These are plants which are striking on account of their fol-iage or peculiar mode of bloom.

Melancholicus Ruber. Deep red foliage; dwarf. Pkt., 5c. Caudatus. Graceful, drooping flowers. Pkt., 5c. Tricolor, or Joseph's Coat. Foliage scarlet yel-Pkt., 5c. low and green.

Antirrhinum - See Snap Dragon, Page 78

"DIAMOND" LAWN GRASS-Makes an Evergreen Velvety Turf.-Page 52.

#### Arabis -Rock Cress

The earliest, prettiest Spring flower. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequaled for rockeries or edgings; withstands the drought and is always neat.

Pkt., 5c. Alpina. Alpina Grandiflora Superba (new). Pkt. 10c.

#### Auricula-Primula Aricula

Beautiful, Spring-blooming flowers. Hardy, per-Pkt., 25c. ennial. Finest Mixed.

Asparagus Plumosus — Asparagus Fern

One of the prettiest house plants. The leaves are bright green, gracefully arched, surpassing Maiden-hair Ferns in grace, delicacy of texture and richness of color. For plants, see Plant Department. Pkt., 25c; 25 seeds, 50c.

#### Asparagus Sprengeri — Emerald Feather

One of the best of the new so-called ferns. Feathery foliage; useful for bouquets, wreaths or sprays, remaining perfect for weeks after cutting. Grows freely the whole year round. (For plants see Pkt., 10c; 25 seeds, 25c. **Plant Department.**)

#### **Bachelor's Button**

#### **Centaurea Cyanus or Corn Flower**

A hardy annual, easily cultivated. Has recently been greatly improved, and now produces hand-some flowers of a great variety of rich colors. Borne on tall, branching stems, with but little foliage. Striking and handsome.

Cyanus. Fine single mixed. Pkt., 5c; oz., 25c. Cyanus. Fine double mixed. Pkt., 10c; oz., 50c. Cyanus. Alba, single white. Pkt., 5c; oz., 35c. Cyanus. Azurea, single blue. Pkt., 5c; oz., 35c.

#### **Balloon Vine**

A rapid, graceful climber, with inflated seed pods; flowers white. Tender annual. Pkt., 5c; oz., 25c.

#### **Browallia**

Handsome, free flowering annual. Covered all Summer with bright, rich blue and white flowers Worthy of more general cultivation. Eighteen Mixed Pkt., 5c. inches high.

#### Brachycome-Swan River Daisy

A charming flower in white and blue varieties. The plants grow about twelveinches in height and bloom freely. They make elegant border plants. Choice Mixed, Pkt., 5c.

#### Balsam

#### Lady Slipper-Touch-me-not.

Exceedingly handsome plants, producing masses of attractive and various colored flowers. Half hardy annual.

Tall Double Camellia Flowered Mixed. Pkt., 5c; 1/4 oz., 25c.

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Begonias are among the most beautiful of flowering plants especially adapted to pot culture. Try our select seed; the finest in the world.

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Ornamental, tropical looking plants of easy culture; large and beautiful flowers. Hardy perennial. For Canna Bulbs, see Plant Department. Crozy's New Large Flowering Mixed.

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#### **Canary Bird Flower**

Climbing plant with graceful foliage and yellow blossoms. Half-hardy annual. Pkt., 5c; 1/4 oz., 15c.

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Candytuft has long been among the most highly prized of garden annuals. The best effect is produced by raising the plants in masses, and sowing the seeds where the plants are to bloom. **ODORATA.**— Sweet scented; white.

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Very showy and attractive. Always covered with a mass of bright flowers. A fine cut flower. CHOICE MIXED DWARF.—Single.

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LANCEOLATA.- A perennial, blooming the first year; flowers rich yellow, single; very fine for cut-

ting. Pkt., 10c; ¼ oz., 25c. GRANDIFLORA.— Perennial. Mixed. Pkt., 10c; ¼ oz., 25c.

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Very handsome and much admired. Produces a profusion of beautiful flowers of unique form and colorings. Fine for pot culture. HYBRIDA .-- Finest mixed. Pkt., 50c.

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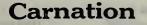
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The well-known Pot Marigold, valued by Europeans for flavoring soups and stews. Flowers are dried in Fall and kept in paper bags for use. In mild climates this plant will bloom nearly all the year round. Plant in early Spring in open ground. **Double Mixed, Pkt., 5c;** ½ oz., 15c.

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A hardy annual, yielding for a long time a profusion of umbels of bright colored flowers. The plant is covered with glutinous moisture, to which flies adhere; hence its name. Fine mixed, all Pkt., 5c; oz., 25c. colors.

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Universally admired, deliciously fragrant. There is no more satisfactory flower to grow and few that are as lasting. The seed we offer is the finest obtainable and our new strains of perpetual flowering carnations will bloom the first year. FINE PLANTS IN SEASON. SEE PLANT DEPARTMENT.

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Seed sown in March or April and transplanted to open ground will produce plants three to five feet high by September, which thereafter and until November, will yield hundreds of blossoms three inches across; they are of various shades, from pure white to purplish crimson. Both foliage and flowers are unsurpassed for bouquets and\_vases. Annual. (Plants in season).

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Very showy, effective and desirable as Summer flowering plants. Hardy annuals.

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Magnificent and indispensable flowering plants for the window garden. The flowers of white, blue, violet and crimson shades, covering the plant with a sheet of bloom.

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HYBRIDA.— Fine mixed.

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A fine pot plant, bearing clusters of curiously shaped and very brilliantly colored flowers, scarlet with black center; half hardy perennial. **Pkt., 20c.** 

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Graceful, free-blooming, half-hardy annuals.

FINEST VARIETIES.—Mixed Pkt., 5c; ¼ oz., 35c. PRESIDENT THIERS.— Dwarf, crimson comb. Pkt., 10c; ¼ oz., 50c.

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(Plants in season.)

A handsome, rapid-growing, climbing plant, hav-ing large, bell-shaped flowers, beautiful foliage and peculiarly delicate and curious tendrils.

Purple, White.

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Universal favorite for hardy borders and beds. Perennial.

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Beautiful Winter and Spring flowering plants for the window and greenhouse. Not only are the flowers of striking beauty, but the foliage is also highly ornamental. The colors range through shades of pink, crimson, white, spotted, etc. Deli-cately fragrant. Bulbs in season.

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climber of rapid growth, having handsome fern-like foliage and a profusion of bright, attractive flowers.

White, scarlet or mixed. Pkt., 5c; oz., 25c.



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Daisy—Bellis Perennis A well-known and popular, low-growing plant bearing beautiful flowers. Hardy perennial. LONGFELLOW.— Double Pink.

Pkt., 15c; 1-16 oz., 40c. DOUBLE .- White, Red or Mixed.

Pkt., 15c; 1-16 oz., 40c. DOUBLE QUILLED .- Mixed.

Pkt., 25c; 1-16 oz., 60c. BURBANK'S SHASTA.— Very hardy; profuse

bloomers; flowers very large and borne on long stems; single; petals pure, glistening white; dark center. Pkt., 15c. See Chrysanthemum

Datura

Large, strong-growing plants, trumpet-shaped flowers, white, sometimes tinted with blue. Roots can be preserved in the cellar, like Dahlias.

FASTUOSA HUBERIANA .- Double mixed.

Pkt., 5c; oz., 50c.

CORNUCOPIA .--- Very fragrant. Pkt., 5c. Euphorbia

Fine, ornamental, foliage plants. Hardy annual. VARIEGATA.- Variegated foliage. Pkt., 5c. HETEROPHYLLA.— Annual Poinsettia

Pkt., 10c.

Eschscholtzia-California Poppy

These are among our most beautiful and popular annuals, being of the easiest culture and giving great satisfaction. They commence to bloom withgreat satisfaction. in a few week's time from Spring-sown seed and continue to flower profusely until late in the Autumn, forming nice, bushy plants, one foot high. SINGLE YELLOW, WHITE OR MIXED.

#### Pkt., 5c; oz., 35c.

**CARMINE.**-

Pkt., 5c; oz., 50c. MANDARIN .- Inner side of petals rich orange,

outer side brilliant scarlet; very striking; single. Pkt., 5c; oz., 40c. DOUBLE MIXED. Pkt., 10c; ¼ oz., 50c. (For other sorts see Poppies.)

Echinocystis, Lobata-Wild Cucumber

A rapid-growing climber. Very good for cover-ing old fences or trellises. Hardy annual.

Pkt., 5c; oz., 25c.

#### Digitalis-Fox Glove

A tall growing biennial, with large leaves and spikes of vari-colored and spotted flowers. A mag-nificent plant. Fine for borders or background. Easily grown. Mixed or white

Pkt., 5c; ¼ oz., 25c.

#### Mirabilis Jalapa--Four O'clock **Marvel of Peru**

A hardy annual, growing luxuriantly in any ordinary soil, and bearing a profusion of bright, handsome flowers of various colors, shades and Flowers open at four o'clock, close markings. in the morning. CHOICE MIXED.

Pkt., 5c; oz., 15c.

DAHLIA

A magnificent, Fall-blooming tuberous-rooted plant, which can be readily started from seed.

DOUBLE MIXED. Pkt., 10c; ¼ oz., 60c. SINGLE MIXED. Pkt., 10c; ¼ oz., 35c. CACTUS.—Flowers odd and fantastic in shape;

all colors. Pkt., 20c; 1/8 oz., 50c.. **DOUBLE MIXED.** 

TWENTIETH CENTURY .-- New single Dahlias of recent introduction; flowers large and hand-New SEMI.DOUBLE GIANT PEONYsome

FLOWERED.

Pkt., 20c; ½ oz., 50c. For Dahlia Roots, see Plant Department.

#### GERANIUM

A half-hardy perennial, easily and quickly grown from seed.

- ZONALE. Extra choice, single mixed, and ering. This is the well-known bedding Ger-Pkt., 10c. Pkt., 10c. ZONALE. - Choice Double Mixed.
- Very finest Pkt., 25c. and newest sorts. Pkt., 25c. LADY WASHINGTON.- Foliage green; flowers large, handsome, oddly marked; fine for pot culture. Finest mixed. **Pkt., 25c.**

For finest true to name Geraniums, See plant department. We deliver them postage free, fine well rooted plants.

#### Gentiana

Fine, showy flowers. Should be in every flower garden. Hardy. ACAULIS. Pkt., 5c.

#### Geum

Chiloense. Hardy perennial. Free-blooming plants. Fine for bouquets.

DOUBLE. SCARLET. Pkt., 5c.

Globe Amaranth-Gomphrena An old favorite, everlasting flower.

MIXED. Pkt., 5c; 1/4 oz., 20c. Gypsophila-Baby's Breath

A pretty, free-flowering plant. Fine for bouquets. **PANICULATA.**— Foliage fine; covered with tiny pure white flowers. Hardy, perennial. Pkt., 5c; ½ oz., 15c.

REPENS.— Dwarf White, for Rock-work. Pkt., 10c; ¼ oz., 25c.

#### Gaillardia

Exceedingly beautiful, half-hardy annuals and perennials, making very showy plants, one to two feet high, for the flower garden. Grown in masses they are especially effective; large flowers, two to three inches across, produced from early Summer until frost; unrivaled for cutting.

PICTA .- Large, handsome, crimson and orange Single flowers. Hardy annual.

Pkt., 5c; ¼ oz., 15c. PICTA LORENZIANA.— Double; finest mixed annual. Pkt., 5c; ¼ oz., 25c

MIXED .- Annual. Many shades of yellow, orange and scarlet. Pkt., 5c; ¼ oz., 15c.

GRANDIFLORA MAXIMA.- Perennial. Gol-A.— Perennial. Gol-Pkt., 10c. ¼ oz., 25c. den.

#### Gourds

Of rapid growth, and bearing curious fruits of various sorts.

Calabash-Pkt., 5c; oz., 25c. Dipper, Bottle and Egg-shaped. Pkt., 5c; oz.,25c Large varieties. Mixed. Pkt., 5c; oz., 25c. Pkt., 5c; oz., 25c. Small varieties. Mixed.





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#### FORGET-ME-NOT.

#### Myosotis-Forget-me-not

Beautiful Spring favorites, of easy growth, bearing clusters of lovely, small flowers. They are perennials and are hardy enough to remain in the open ground except in very cold latitudes. for borders and shady situations. Fine

ALPESTRIS .- Of trailing habit, with pretty flowers Blue or mixed. Pkt., 5c; 1/4 oz., 25c. VICTORIA .- Flowers large, bright azure blue;

fine for borders and pots. Pkt., 10c; 1/8 oz., 25c. SEMPERFLORENS .- Dwarf; continuous bloom-

er; blue. Pkt., 10c; 1/8 oz., 50c.

#### Gilia

Gilias are free-flowering, hardy annuals, one foot high, with finely cut foliage and clusters of small, delicate flowers, white, lilac, and rose color; desirable for cutting and suitable for beds, rockwork, and edgings. Mixed. Pkt., 5c; 1/2 oz., 15c.

#### Gloxinia

Most charming, greenhouse plants of dwarf habit. Their flowers are produced in greatest profusion, and of the most exquisite and gorgeous colors, many of which are magnificiently spotted, mottled and blended. Under the commonest culture they bloom continuously for months.

**HYBRIDA** GRANDIFLORA .- Splendid mixture of finest varieties. Plet., 25c.

ROBUSTA .- Erect, hardy, superb mixture. Pkt., 25c.

#### Grevillea Robusta-Silk Oak

Very beautiful and graceful foliage plant with fern-like foliage - a splendid pot plant. Pkt., 10c.

#### Godetia

The Godetias are profuse and constant bloomers, and their delicate tints of crimson, rose and white render them very attractive. Hardy annuals. **SEMI-DWARF.**— Fine mixed.

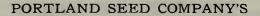
Pkt., 5c; ¼ oz., 15c. GLORIOSA. LORD ROBERTS.— Dark red. Dark red.

Pkt., 10c; 1/4 oz., 25c. compact, fine.

#### Heliotrope

fragrant, free-blooming, tender, s. Splendid for bedding or pot Delightfully perennial plants. culture. One foot high of spreading habit. The fragrance of its flowers can not be excelled in exquisite delicacy.

Invaluable for bouquets. **Pkt., 10c;** ½ oz., 25c. **OWERED.**—Blue, white or mixed CHOICE MIXED. MAMMOTH FLOWERED.very fine. Pkt., 15c; 1/8 oz., 50c.



## Hollyhock, or Althaea

THE modern Hollyhock is quite different and much more beautiful than the plant of twenty years ago L being much more compact in growth; the flowers are larger, richer colored, and the double varieties are fuller and of better form. For a background to a flower garden there can be nothing better. Hardy perennials; five feet high.

CHATERS .- Superb strain, varieties of greatest perfection

DOUBLE,-- White, crimson, pink, yellow, salmon and lilac. Pkt., 10c; ¼ oz., 60c. MIXED .- All double varieties.

Pkt., 10c; 1/4 oz., 50c. ALLEGHENY.— A popular variety with very large flowers; petals beautifully fringed and crinkled; coloring rich and attractive. **Double Choice Mixed.** Pkt., 10c; 1/4 oz., 50c.

#### Helichrysum-Straw Flower

MONSTROSUM .- Everlasting. One of the best for Winter bouquets. Hardy annual. Double White yellow and crimson. mixed.

Pkt., 5c; ¼ oz., 25c.

Hibiscus-Marshmallow Strong-growing plants of very easy culture and exceedingly showy. Has large, cup-shaped flowers. Hardy annual. Extra mixed. Pkt., 5c.

Hunnemannia—Giant Yellow Tulip Poppy FUMARIAEFOLIA.—Best of the poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large, buttercup-yellow, poppy-like blos-soms, and never out of flower until hard frost. Pkt., 10c; ¼ oz., 25c.

Hyacinth Bean-Dolichos Lablab

Rapid growing, ornamental, climbing annuals, bearing clusters of beautiful purple and white flowers, followed by highly ornamental seed pods. Mixed. Pkt., 5c; oz., 15c.

### **Ice Plant**

Mesembrianthemum Crystalinum

Pretty Summer trailing annual for vases and rock work; leaves covered with ice-like drops.

Pkt., 5c; oz., 35c. Kochia Trichophylla—Summer Cypress or Fire Bush.

Annual forms highly decorative bushes, foliage green, turning to fiery red in Autumn.

Pkt., 10c; ¼ oz., 25c.

Lantana

A free-flowering shrubby plant, suitable for out-door or pot culture. The flowers emit an agreeable odor and are of many shades of purple, orange and white. Half-hardy perennial. HYBRIDA FINE MIXED. Pkt., 10c; ½ oz., 25c.

Leontopodium Alpinum—Edelweiss

Hardy perennial, very curious flowers. Pkt., 25c.

#### Lupinus-Lupin

Very desirable shrubby plants, bearing long spikes of various colored flowers.

ANNUAL MIXED.	Fkt.,	5c;	oz.,	20c.
PERENNIAL MIXED.	Pkt.,	5c;	oz.,	30c.

#### New Annual Hollyhocks

#### Hybrida Semperflorens.

This splendid variety will bloom in August, from Spring planting, continuing until frost. This is a great advantage, as other varieties 'do not bloom until the second year. Try them.

Finest new single or double mixed, pkt., 10c; 1/4 oz. 50c.

#### Larkspur-Delphinium

A very ornamental class of profuse blooming Their tall spikes of many colored flowers plants. produce a striking effect when planted in groups. DWARF ROCKET .--- Finest colors. Double mixed.

- Hardy annual. Pkt., 5c; ½ oz., 25c.
- TALL ROCKET.— Finest colors. Double. Annual.
   Philes. Double. Annual.

   Pkt., 5c; ½ oz., 20c.
- PERENNIAL MIXED.— Single.

Pkt., 5c; ¼ oz., 20c. STOCK FLOWERED, OR TALL BRANCHING. -Finest double mixed. Pkt., 10c; 1/4 oz., 25c.

CHINESE AZUREUM .-- Single blue; fine for Pkt., 10c; ¼ oz., 30c. cutting.

#### Linum-Crimson Flax

ANNUAL.-- Beautiful and effective; hardy, about 18 inches high; covered with brightt scarlet flowers.

Pkt., 5c; oz., 25c. Pkt., 5c; oz., 35c. PERENNIAL.- Mixed.

#### Lobelia

Delicate, low-growing, annual plants of the greatest value for borders, ribbons, edgings, rockwork and hanging baskets.

**HYBRID HAMBURGIA.**—New; light blue with white eye, long, drooping flower stalks; fine for hanging baskets or boxes; grows rapidly.

Pkt., 10c; 1/8 oz., 50c.

GRACILIS .-- Blue, trailing; beautiful for baskets Pkt., 5c; ¼ oz., 25c. CRYSTAL PALACE COMPACTA.— Plant dwarf

flowers very fine and rich, deep blue; finest for bedding and edging: **Pkt., 10c;** ½ **oz., 50c.** 

COMPACTA.- Finest mixed. Pkt., 5c; ¼ oz., 50c. COMPACTA EMPEROR WILLIAM.

Pkt., 10c; ½ oz., 40c. WHITE LADY .- New, white flowering.

Pkt., 10c; ¼ oz., 50c. CARDINALIS, PERENNIAL.— Taller than other

sorts; flowers rich red. Pkt., 10c; 1/8 oz., 50c

#### Lychnis

There are few plants that produce more brilliantly colored blossoms than Lychnis. They are borne in clusters and continue fresh and brilliant for a long time. Hardy perennials, one to three feet high.

HAAGEANA HYBRIDA.- Mixed.

Pkt., 10c; 1/8 oz., 25c.

Mignonette

A quick-growing annual, highly esteemed for its delicate fragrance. It grows most rapidly and produces the largest and finest spikes of blossoms during cool, moist weather of early Spring and late Fall months, but will flower freely throughout the Summer from seed sown early in Spring. A second planting should be made about the first of August to furnish large, fine spikes of flowers during the cool Fall months.

fine,

GRANDIFLORA.- Large, well-**ODORATA** formed, fragrant flowers. **Pkt.**, **5c; oz.**, **25c. ALLAN'S DEFIANCE.**— A choice strain for forc-Spikes of enormous size and intensely rich ing. perfume. One of the most desirable for open ground Pkt., 10c; ½ oz., 50c. PARSON'S WHITE. -- Flowers almost pure white; Pkt., 10c; 1/2 oz., 50c. very fine.

Splendid Dwarf variety, MACHET.--White Pearl Pkt., 15c; 1/2 oz., \$1.00. best white.

GOLDEN QUEEN .--- Dense, dwarf growth; flowers golden yellow; deliciously fragrant. Pkt., 10c; 1/2 oz., 50c.

MACHET, - Ruby; dwarf, compact; flowers red; fine, Pkt., 10c; ½ oz., 50c.

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#### Mimosa-Sensitive Plant

PUDICA.— Very curious and interesting plant; its leaves closing if touched or shaken Annual its leaves closing if touched or shaken. Annual. Pkt., 5c.

#### Morning Glory

The tall varieties are popular, well known, rapid prowing climbers of the easiest cultivation. Very ine for covering arbors, trellises, porches, etc. The Minor, or Dwarf varieties flower very freely and do lot require support.

CONVOLVULUS MAJOR .- Tall, choice single, mixed, all colors. Pkt., 5c; oz., 15c. DOUBLE MIXED.—Tall. Pkt., 10c; 1/2 oz., 25c.

CONVOLVULUS MINOR.— Dwarf mixed. Pkt., 5c; oz., 25c.

- **MPERIAL JAPANESE FRINGED.** These have very large fringed flowers in a great variety of the most exquisite colorings; handsome, varie-gated foliage. Mixed. **Pkt., 10c; oz., 25c.**
- APANESE DOUBLE MIXED.— This double Japanese sort is very fine in leaf, flower and Pkt., 25c; oz., \$1.00 growth.

Moon Flower-lpomoea Mexicana Grandiflora

Rapid growing climber belonging to the Morning Glory family. The flowers are large, waxy white and very showy. **Pkt.**, 10c; ½ oz., 20c.

#### Marigold, or Tagetes

The French and African Marigolds are valuable for their flowers in Summer, and can be grown to advantage in little clumps with other plants in the ront of shrubberies or in the garden border. ( of flowers, yellow, red, brown and variegated. Color

The African varieties are the taller in growth, and produce large, self-colored blossoms. The French varieties are smaller, some of them being elegantly striped and spotted.

AFRICAN.- Tall or dwarf, double mixed.

Pkt., 5c; 1/4 oz., 20c. FRENCH.- Tall or dwarf, double mixed.

Pkt., 5c; 1/4 oz., 20c.

#### Mimulus

MOSCHATUS, OR MUSK PLANT. - Cultivated for its rich, musky odor. Should have a rich soil and ample moisture. Hardy perennial. Pkt., 10c.

TIGRINUS NANUS, OR MONKEY FLOWER. -Mixed, beautifully spotted, all colors. Pkt.,10c.

#### Nicotiana

A very showy plant, producing star-shaped flowers of delicious perfume. Taken up in the Fall, cut back and potted, will bloom freely all Winter. Half hardy annual, three feet high.

AFFINIS. - White. Pkt., 5c; 1/4 oz., 25c. HYBRIDIA .- Splendid mixed.

Pkt., 10c; 1/4 oz., 50c. SYLVESTRIS.— Pure white, fragrant, drooping flowers; deep green foliage. Pkt., 5c; ¼ oz., 25c.

SANDERAE .- Resembles the Affinis, but unlike that variety, does not close up in the daytime. The plant is literally covered with carmine-red, fragrant flowers. Pkt., 15c.

#### Nemophila—Love Grove

Hardy annuals of neat, dwarf, compact growth; fine for borders, pot culture or rockeries. Flowers blotched and beautiful. Mixed varieties.

Pkt., 5c; 1/2 oz., 15c.

#### Nigella

LOVE-IN-A-MIST, OR DEVIL-IN THE-BUSH. Compact growing, free flowering plants with curious looking, showy flowers and finely cut foliage. Hardy annuals. Mixed.

Pkt., 5c; ½ oz., 15c. DAMASCENA.—(Miss Jekyll.) Finest double blue flowers, with fern-like foliage.

Pkt., 10c; ¼ oz., 25c.

#### **Passiflora**—Passion Flower

Most interesting and well-known climbers, bearing singularly beautiful flowers. MIXED.

Pkt., 10c.

#### Pampas Grass-Gynerium Argenteum

A noble ornamental grass, easily grown from seed, producing majestic plumes that are invaluable for Winter decorations. See Plant Dept. Pkt., 5c.

#### Pentstemon

Beautiful, hardy, perennial, herbaceous plants with extremely brilliant blooms. Their bell-shaped flowers are borne on long spikes, and are produced abundantly all Summer. MIXED.

Pkt., 5c; ¼ oz., 75c.

#### Perilla Nankinensis

Dark purple foliage plant. Half-hardy annual. Pkt., 5c.

#### Pueraria Thunbergia-Kudzu Vine.

Beautiful Japan climber, hardy perennial with fragrant purplish-violet, wistaria-like flowers. Pkt., 10c; ¼ oz., 50c.

#### Phlox Drummondi

The blooms of Phlox Drummondi are unrivaled for richness and beauty of color, ranging from white to the deepest scarlet and purple. They are abundant, almost covering the foliage and of long dura-tion. Very desirable, and easily grown. For cut-ting for bouquets or for bedding in masses they are unsurpassed. Hardy annual, one foot high.

CHOICH	E MIXED.	Pkt.,	5c;	¼ oz.,	50c.
ARGE	FLOWERING	Flower	s larg	ge and	bril-
liant.	Mixed.	Pkt.,	5c;	¼ oz.,	30c.
ARGE	FLOWERING	Scarlet	or w	hite.	
				¼ oz.,	
STAR P	HLOX.—(Cuspida	ta). Flo	owers	have a	a dis-

tinctive star-like appearance, with white margins, excellent for bouquets. Pkt., 10c; 1/4 oz., 30c. **DWARF.**— Mixed; finest flowering sorts.

Pkt., 10c; ¼ oz., 50c.

For PERENNIAL PHLOX—See pages 72 and 82

FIRST PRIZE for Best Exhibit has been awarded to our "Diamond Quality" DAHLIAS every time we have shown.-They represent the choicest, most improved varieties from the most Famous Producers, They are true to name and have proven their merits in the big European and American Shows, and in our own field trials.

THEY WILL WIN FOR YOU-See Page 84.



The new Dwarf Nasturtiums make beautiful bedding and border plants and are covered with bloom until late autumn.

**N**ASTURTIUMS are hardy annuals, of easy cultivation and flower best where the soil is not too rich. The new hybrids include various shades of rose, salmon, bright red, pale yellow, etc., either self-colored or .spotted, mottled, striped and margined.

For covering trellises, fences, arbors, piazzas, trailing from vases, over rockwork, for bedding, etc., nothing can equal the gorgeous effect produced by their marvelous wealth of bloom, borne in uninterrupted splendor from early Summer until cut down by frost. The seeds, picked green and pickled in vinegar, have a piquant, appetizing flavor that is a valuable addition to relishes or pickles.

#### NASTURTIUMS-Tall

COQUETTE .- Variable flowers marked and blotched in many brilliant colors. Pkt., 5c; oz., 15c; ½ lb., 30c; lb., \$1.00.

KING THEODORE.- Large velvety crimson flow-

ers, very attractive dark green leaves. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

MOONLIGHT. — Soft primrose. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00

SUNLIGHT.— Large, bright golden yellow flow-ers. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00. PRINCE HENRY.— Fine lemon yellow, clear carmine blotches.

Pkt., 5c; oz., 10c; 1/4 lb., 30c; lb., \$1.00. TWILIGHT .- Extra large light salmon, suffused rosy salmon.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.90. RE.— Of standard tall varieties. MIXTURE.-

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c. NASTURTIUMS-Dwarf

CHAMELEON .--- Variable colorings in bronze, crimson and yellow, rich markings.

Pkt., 5c; oz., 15c; 1/4 lb., 40c. CLOTH OF GOLD .- Brilliant scarlet, golden yel-Pkt., 5c; oz., 15c; ¼ lb., 40c. low leaves.

EMPRESS OF INDIA.- Intense scarlet, purplish Pkt., 5c; oz., 15c; 1/4 lb., 40c. green leaves.

PRINCE HENRY .-- Lemon yellow with carmine blotches Pkt., 5c; oz., 15c; 1/4 lb., 40c. **RUBY KING.-**

Ruby red. Pkt., 5c; oz., 15c; ¼ lb., 40c. VESUVIUS .- A rich salmon orange, dark foliage.

Pkt., 5c; oz., 15c; ¼ lb., 40c. MIXTURE - Of standard varieties.

Pkt., 5c; oz., 10c; 1/4 lb., 30c.

#### NASTURTIUMS—Lobb's Climbing

A distinct strain of tall Nasturtiums, flowering more freely than the standard varieties.

ASA GRAY.- Large, bright lemon flowers.

Pkt., 5c; oz., 15c; 1/4 lb., 40c. BLACK PRINCE .- Such a rich, dark maroon as to appear velvety black. Foliage very dark.

Pkt., 5c; oz., 15c; ¼ lb., 40c. CROWN PRINCE OF PRUSSIA.— Rich, deep ruby garnet. Pkt., 5c; oz., 15c; ¼ lb., 40c.

SPITFIRE .- Free-blooming, brilliant scarlet. Pkt., 5c; oz., 15c; 1/4 lb., 40c.

NAPOLEON .-- Fine golden yellow, spotted brown.

Pht., 5c; oz., 15c; ¼ lb., 40c. QUEEN VICTORIA.— Deep orange. Pkt., 5c; oz., 15c; ¼ lb., 40c. MIXTURE — Of standard varieties Lobb's climb-

ing. Pkt., 5c; oz., 10c; 1/4 lb., 30c; lb., \$1.00.

#### NASTURTIUMS-Mixed

IVY LEAF .- Tall Mixed -- climbing habit with pointed leaves of rich ivy green veined white, re-sembling English Ivy. Flowers have narrow petals and are quite distinct and pleasing. Pkt., 5c; oz., 20c; ½ lb., 50c.

IVY LEAF .- Dwarf Mixed.

Pkt., 5c; oz., 20c; ¼ lb., 60c. - Tall Mixed — Foliage beauti-VARIEGATED.fully marked and marbled yellow and cream on the green ground, some leaves appearing almost white. Flowers come in all colors and markings.

Pkt., 10c; oz., 25c; 1/4 lb., 75c. VARIEGATED. - Dwarf Mixed.

Pkt., 10c; oz., 25c; 1/4 lb., 75c.

MASTODON PANSIES

#### Etna Mills, Calif.

Gentlemen:- The Pansy seeds I got from you last year were the best that ever came to this part of the country. Mastodons were simply grand. I should like to get some of the same strain this year again.

LEONARD JOSS.

Walla Walla. Gentlemen:— Last Spring I sent to your firm and got some Pansy seed. They were the largest I ever saw and bloomed grand from April until snow fell. MRS. W. C. GOADE.

MASTODON PANSY SEED MASTODON PANSY PLANTS PAGE 71 PAGE 79

OUR 64-PAGE NURSERY CATALOG of Fruit and Ornamental Trees and Shrubs sent Free on request. Ask for it.

#### COMPLETE SEED ANNUAL

# PANSIES

UR Pansy Seeds are imported direct from the leading pansy specialists of Europe and are the best selections from the new and improved standard ypes, being absolutely the finest seed obtainable. t was from these that our new Mastodon Strain ras developed and we urge growers to take adantage of this opportunity to secure seed.

For early outdoor bedding, seed should be sown a the early Fall, in rich, moist garden soil or in cold frames. Spring sowings should be made early

## MASTODON PANSY PLANTS From February to June

We offer Our Famous Mastodon Pansy Plants packed in baskets of 1 doz. each.

SEE PLANT DEPARTMENT PAGE 79

For Newest SWEET PEAS See page 74

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## **Mastodon Pansies**

**F**OR years the Steele Pansy Gardens have grown our Giant Pansies and co-operated in securing the finest strains from the world's most celebrated growers. These have been carefully reselected and red up to their present surpassing excellence, and for giant size, substance, form and coloring we have hever seen Pansies to compare with them. Named varieties and special strains are grown separately and he seed collected by hand and carefully blended into what we believe to be the finest mixture ever offered. This is your opportunity to secure Mastodon Pansy Seed, Diamond Mixed, and as only a small mount will be offered, you should order now. Pkt., 25c; Trade Pkt., \$1.00.

#### Our Gold Medal Collection Giant Pansies One Pkt. each of the 10 Varieties. \$1.00.

ADONIS.— A distinct and beautiful shade of light blue with white center and dark blotch, a most pleasing and attractive variety. **Pkt., 10c.** 

- BRIDESMAID.— A beautiful, clear white, with shining rose colored blotch; a rare and desirable new pansy of the largest size. **Pkt.**, 15c.
- FIRE KING.— Lower petals margined white, with large magenta blotch that has a yellow margin; upper petals bright reddish bronze. Pkt., 10c.
- GOLDEN QUEEN.— A rich, pure yellow of the grandest form and size. A valuable addition to the yellows, which are very hard to produce in the Giant strains. **Pkt., 10c.**
- GIANT DARK BLUE.— A splendid blue black, very elegant, and of good substance; should be grown by everyone. Pkt., 10c.

- GIANT STRIPED.— A superior strain of truly giant pansies, with the most beautiful striped markings in the richest dark shades. Very popular in Europe. **Pkt., 10c.**
- MADAME PERRET.— A beautiful and distinct type with edges of petals frilled — bordered white, colors are dark wine — pink and red, beautifully veined. The earliest of the Giants, has sweetest perfume and keeps up its size of flower longer than any other. We offer the best strain.

Pkt., 15c.

- **RUBY KING.** Rich shades of red, a superb variety, of fine form and substance. **Pkt.**, **15c.**
- SNOW FLAKE.— A grand, pure white, of extra fine quality. Pkt., 10c.
- VULCAN.— A magnificent new dark, glowing red with five large, black spots; blooms of perfect form and great substance; but its chief value lies in the superb coloring which has never been attained before. Be sure to try "Vulcan."
   Pkt., 25c.

## **Popular Large Flowering Pansies**

- EMPEROR WILLIAM.— A dainty cornflower blue, very showy; a splendid variety of large size and good substance. Pkt., 10c.
- KING OF THE BLACKS (Giant.)— Immense velvety black flowers of the finest quality; the largest and best black pansy. Pkt., 10c.
- **TRIMARDEAU GIANTS.** Of remarkably large size and robust growth; very fine.
- White, Yellow, Striped, Black, Blue or Mixed. Pkt., 10c; ¼ oz., 60c; oz., \$2.00.
- MASTERPIECE GIANT RUFFLED. The mammoth size, richness and beauty of colorings and frilled or ruffled character of the petals, make Masterpiece one of the most distinct and interesting Parsies aver developed — Pht 25c.
- teresting Pansies ever developed. Pkt., 25c. PRINCE BISMARCK.— Light brown shades, with black eye; very beautiful and distinct; true giant variety. Pkt., 10c.
- PRINCE HENRY.— A new giant variety, of a brilliant, dark indigo blue, with violet luster, each petal having a large, dark brown, veined blotch. Edges of petals slightly ruffled.

Pkt., 15c.

ANNUAL and PERENNIAL Border and Bedding Plants. A select list of the most desirable varieties.—Plant Dept., Page 79 PORTLAND SEED COMPANY'S



#### PANSIES-Continued **Fancy Strains of Mixed Pansies**

BUGNOT.-Flowers of enormous size, blotched and veined; the shadings comprise tints of red bronze

and brown not found in any other mixture. Pkt., 25c; ½ oz., 75c. ELITE LARGE FLOWERED MIXED—No pains are spared by our German grower to make this strain absolute perfection in form, firmness of texture, size, freedom of bloom, and elegance and variety of markings and colorings. There is no mixed Pansy seed offered superior to this. Pkt., 25c; 1/8 oz., 75c.

CASSIER .- A very fine mixture; flowers large and marked with three or five blotches. Pkt., 25c; 1/8 oz., 75c.

ODIER OR BLOTCHED.—Superb, large flowers. beautifully blotched with rich and varied colors, Extra mixed. Pkt., 25c; ½ oz., 75c. PARISIAN.—Largest spotted, new. Very large

flowering. Very handsome. Pkt., 25c; 1/8 oz., 75c.

FINE MIXED .- A fine assortment of colors. Pkt, 5c.; 1/4 oz., 25c.

#### Petunia, Hybrida

Too much can not be said in praise of the Petunia as a bedding plant. Our clear, bright Summers seem L to bring out its best qualities. During the whole season it is covered with large, showy blossoms, which are always bright and fresh, in spite of heat and drouth. The flowers are of an almost infinite variety of colors and markings, and quite as varied in form; large and small, fringed and plain, double and single. Hardy annual. Large assortment.

Single Fine Mixed Pkt., 5c; 1/8 oz., 25c. Saved from the best Single Choicest Mixed. flowers. Pkt., 10c; 1/8 oz., 50c. Large Flowered; very Pkt., 25c. Single Fringed Mixed. desirable.

#### Pink-Dianthus

The Dianthus family embraces some of the finest of all flowering plants. The blooms are of the rich-est and most pleasing colors, and nothing can surpass the exquisite fragrance of some varieties. They are hardy, and become perennial in warm climates. Chinensis. Single mixed. Pkt., 5c; ¼ oz., 15c. Chinensis. Double mixed. Pkt., 5c; ¼ oz., 25c. Heddewigii. Single mixed. Color varies from richest velvety crimson to delicate rose.

Pkt., 5c; 1/4 oz., 25c. Heddewigii. Double mixed. ed. Large flowering, Pkt., 10c; ¼ oz., 50c. splendid. Heddewigii Diadematus. Double Diadem Pink. Pkt., 5c; ¼ oz., 35c. Fine single and double Extra fine. Heddewiggt Laciniatus. fringed, finest assorted colors. Pkt., 10c; 1/4 oz., 50c Heddewigii Fireball. Extra double, brilliant dark scarlet Very beautiful

Pkt., 10c; ¼ oz., 50c.

#### **Poppy**-Papaver

## For Fine Plants and Two-Year Clumps See Plant Department

The poppy is well-known and really a magnificent which is borne separately on tall stalks. flower Poppies are very showy and come in many bright and charming colors. Some are hardy annuals, others are perennials, and may be sown as the ground can be prepared.

**Double Carnation Flowered.** Flowered. Annual. Fringed; Mixed. Pkt., 5c; oz., 25c. colors are dazzling. Mixed. Pkt., 5c; oz., 25c. Shirley. Annual. The range of color, extending from white through delicate shades of pink, rose and carmine, to the deepest crimson; fine for cutting. Best single mixed. Pkt., 10c; ½ oz., 25c. **Perennial Popples** 

Hardy perennial; very showy red. Pkt., 5c; ¼ oz., 20c. Bracteatum.

- Iceland, or Nudicaule. These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches in height, bearing yellow, white or orange-scarlet flowers in endless profusion and most useful for cutting; hardy perennial. Mixed Pkt., 10c; ¼ oz., 25c. colors
- Annual. Petals satiny white, nois rose. Very beautiful and Mlss Sherwood. shading to chamois rose. Very beautiful and Pkt., 10c; ½ oz., 25c.

Double Scarlet or White. Annual.

Pkt., 5c; oz., 25c. Annual. White Pkt., 5c; oz., 30c.

Double American Flag. bordered with scarlet. Pkt., 5c; oz., 30c. Umbrosum. Annual. Rich vermilion, with a glossy black spot on each petal; single.

Pkt., 5c; oz., 30c. Callfornla Poppy. See Eschscholtzia, page 66. Double Choicest Mixed. Full and handsome. Pkt., 25c. Double Fringed Mixed. Pkt., 25c. GIANT CALIFORNIA—Extra Select. Blotched and striped, fringed and ruffled. Mixed. Pkt., 25c

#### Portulaca-Rose Moss

Brilliant dwarf annuals, only six inches high, luxuriating in warm situations, and blooming profusely from early summer to autumn. For low beds and masses of color from spring until frost, they are in-dispensable; colors range through innumerable shades of red, yellow, pink, white, striped, etc. Single Mixed.

e Mixed. e Mixed. Pkt., 5c; ¼ oz., 20c. le Mixed. Pkt., 10c; 1-16 oz., 25c. Phormium—New Zealand Flax **Double Mixed.** 

Tenax. Has handsome, variegated foliage.

#### Pkt., 10c; ¼ oz., 50c. Pyrethrum

Very ornamental plants, for both folage and flowers.

Parthenium Aureum, or Golden Feather, Beautiful, gold leaved, flower white.

Pkt., 10c; ¼ ox., 25c. Selaginoides. Fine, fern-leaved sort; flowers bright golden yellow. Pkt., 10c; ¼ oz., 35c.



**Phlox Decussata**—Perennial Hardy, perennial; mixed. Pkt., 10c; 1/8 oz., 50c. For Phlox Drummondi see page 69.

**Perennial Phlox**—Plants Newest and best varieties, fine large clumps. See plant department, page 82. \$1.50 doz.



#### Primula-Primrose

The first three varieties named below are hardy, arly blooming garden plants, and the others beau-iful, Winter blooming house plants. Their various orms and blending of colors are exceedingly pleas-ng and effective. They thrive best in a sandy loam nd leaf mold.

POLYANTHUS.-- Early blooming, dwarf growing plants. Valuable for outdoor bedding. Mixed Pkt., 10c; 1/8 oz., \$1.00. colors.

/ULGARIS.— Yellow, common, English Primrose. Pkt., 10c; ½ oz., \$1.00.

APONICA, OR JAPANESE PRIMROSE. --- The beautiful, large, various colored flowers stand in whorls, pyramidically arranged on short flower stems one foot high; though perennial, new plants flower more freely, and seeds should be sown every year. Mixed varieties. Pkt., 15c; 1/8 oz., \$1.00.

INENSIS, OR CHINESE PRIMROSE. The beautiful, large fringed flowers stand in pyramids arranged on short flower stems. Blossoms of every shade of color, from pure white to deep crimson, and even deep blue; especially fine for Winter and Spring flowers in the house; easily grown; free bloomers. Finest mixed. Pkt., 25c; 1-32 oz., \$2.00.

SINENSIS .- Pure white or red. Pkt., 25c.

SINENSIS, ALBA .- New; finest large white, with yellow eyes. Pkt., 50c. Pkt., 50c.

SINENSIS .- Double finest mixed.

OBCONICA GRANDIFLORA .- A lovely profuse bloomer, bearing beautiful single flowers. This is really an ever-blooming plant, producing elegant clusters of flowers continuously throughout the year. Pkt., 10c; 1-16 oz., \$1.50.

#### **Oenothera**-Evening Primrose

The Oenothera, or Evening Primrose, produces arge, showy blossoms, which are fully expanded only during the evening and early in the morning. The flowers, which are from three to four inches cross, attract much attention on account of their ize, beauty and the rapidity with which they open. They are constant and prolific bloomers. Fine Pkt., 5c; 1/4 oz., 25c. nixed.

#### Rhodanthe

A beautiful everlasting annual for garden or out culture; height, 1 ft.; mixed colors. Pkt., 5c.

#### Shamrock

True Shamrock Seed is very rarely offered for ale in this country. It is a hardy perennial and will thrive in any good garden soil.

Pkt., 15c; oz., 50c.

#### Salpiglossis

Produces very showy, funnel-shaped flowers of large size. Fine for beds. Half-hardy annuals. FINE DWARF.— Mixed. Pkt., 5c; ¼ oz., 25c. GRANDIFLORA.— Mixed. Large flowering. Pkt., 10c; 1/4 oz., 35c.

Salvia-Flowering Sage

Very ornamental; flowers borne in spikes of flery red or crimson, and continue in bloom in open ground until after severe frosts. Start in heat and transplant into light soil, one to two feet apart. Excellent for bedding in masses or single planting. Hardy annuals.

SALVIA SPLENDENS.— Brilliant scarlet.

Pkt., 10c; 1/4 oz., 50c.

SALVIA ZURICH.— New Dwarf Early. The finest of all Dwarf Salvias. Very floriferous. Pkt., 15c; ½ oz., \$1.00.

BONFIRE.-(Clara Bedman). One of the finest Salvias ever introduced; compact bush about two feet in height and diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark green foliage and completely cover the plant. Pkt., 15c; ¼ oz., \$1.00.

#### For Salvia Plants, see Plant Department.

#### Stocks-Double Ten Weeks

These popular flowers are easily grown, and are so highly fragrant and of such beauty that they deserve a place in every garden. They are great improvements over the Gilliflowers of the olden times, being much larger and more densely double and of a great variety of colors.

DWARF LARGE FLOWERING .- White, scarlet, Rose, Light Blue, or Mixed.

Pkt., 10c; 1/8 oz., 50c. EMPEROR, OR PERPETUAL.- Mixed.

Pkt., 10c; 1-16 oz., 50c. WINTER, OR BROMPTON .- Mixed.

Pkt., 10c; 1-16 oz., 50c. GIANT PERFECTION.— Handsome pure white. Pkt., 15c; ½ oz., 75c.

GIANT PERFECTION .- Double mixed. Pkt., 10c; 1/8 oz., 50c.

Virginian Stock

A fine, early flowering plant. Hardy annual. IXED. Pkt., 5c; ¼ oz., 15c. MIXED.

#### **Three Fine Named Stocks** Splendid for Forcing.

SNOWFLAKE .- Large, double, snow white flowers; dwarf, ten weeks Pkt., 15c; ½ oz., 75c. BEAUTY OF NICE.— Very large flowers of a delicate flesh pink. Extra fine.

Pkt., 15c; ½ oz., 75c. PRINCESS ALICE.— Large, flowering white, fine for cutting. Extra large spike.

Pkt., 15c; 1/8 oz., 75c.

#### Saponaria

Pretty, dwarf bedding plant. scarlet flowers. Hardy annuals. Red, white and

Pkt., 5c; 1/2 oz., 20c. FINE MIXED. Schizanthus—Butterfly Flower

Beautiful, garden annuals, flowers charmingly fringed and delicately colored; one to two feet. MIXED COLORS. Pkt., 5c; ¼ oz., 25c.

#### Statice-Sea Lavender

Beautiful for Winter bouquets; flowers very

pretty. ANNUAL VARIETIES.— Mixed. ANNUAL VARIETIES.— Mixed. Pkt., 5c. PERENNIAL VARIETIES.— Mixed. Pkt., 10c.

#### Stipa Pennata—Feather Grass

A pretty ornamental. Grown for its plumes; not so large as Pampas. Pkt., 10c.



#### PORTLAND SEED COMPANY'S

#### "Diamond Quality" SWEET PEAS for 1914

OUR Famous "Diamond Quality" Sweet Peas are selected with critical care and we offer the best productions of the foremost growers, including the latest, most valuable novelties. We conduct careful trials, and, for quality and assortment of varieties, our stocks are unsurpassed. Although we list only those we consider best, we can supply any variety in commerce, and special orders will receive careful attention.

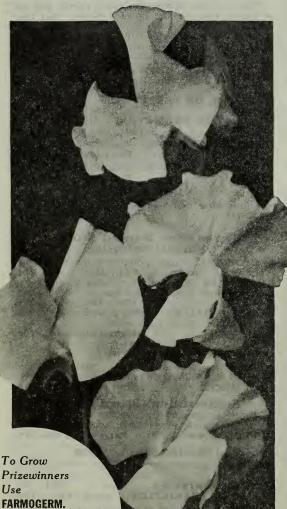
**CULTURE.**—First and most important, plant as early in the spring as the conditions will permit-If the ground is well drained earlier flowers can be had from fall.plantings. The ideal soil is cool, moist, and well drained, and should be dug up the previous fall, manure well worked in, and left to lie in the rough through the winter. In the early spring work this down enough to plant, which can be done before conditions will permit working of ground that has not been previously prepared. This gives an earlier and better start than if you wait until spring to work your soil, but the late spring plantings will often give very satisfactory results in some sections.

Seeds should be sown at the rate of one ounce to fifteen feet. Make a trench about three to four inches deep, planting the seeds in the bottom about two inches deep, pressing the soil down firmly. After the plants are well up, thin to four or five inches apart, and draw the soil around them until the trench is filled above the level. This gives a depth to the roots, preserving the moisture. Keep the ground well worked and water if needed, an occasional thorough soaking being better than a daily sprinkling. Keep the flowers cut close and a pruning of the tips of the vines will also aid in prolonging the season of bloom and insuring better flowers.

## 1914 Diamond Collection--8 Superb Spencers

Including the very choicest of the wonderful 1914 introductions — superior in color, form, substance and vigor to the varieties heretofore offered.

#### PRICE, ENTIRE COLLECTION, 8 Superb Varieties, \$1.00 Postpaid



Page 51

**KING WHITE.**— The newest and most magnificent white; of perfect Spencer type; the immense petals gracefully frilled — are a pure white of wonderful substance. **King White** has the most enthusiastic endorsement ever accorded a sweet pea from the world's greatest sweet pea specialists of Europe and America. Certificate of Merit Pennsylvania Hort. Society and National Sweet Pea Society of England. Be sure to order **King** 

White. Pkt. 15 seeds, 15c; 2 pkts., 25c.

- WEDGEWOOD.— A true self being a beautiful Wedgewood blue; entirely free from the purple shading found in other blue Spencers. Wedgewood is also larger, grows more vigorously, and blooms more freely than other blues. Certificate of merit. Pkt., 15c; 2 pkts., 25c.
- **ILLUMINATOR.** A brilliant orange-salmon ground, illuminated with bright cerise pink; a rare and wonderful color combination of great beauty. First class certificate.

Pkt., 15c; 2 pkts., 25c.

"MARGARET ATLEE." The most perfect of the Duplex type yet produced. Color is a warm salmon pink suffused over a cream ground. The cream deepens into a bright buff at base of standard and wings and this lights up the flower with splendid effect. Flowers are of very large size and are borne almost uniformly four on a stem. Certificate of merit American Sweet Pea Society.

Per pkt., 15c.

**CHARM.**— A glistening snow white of fine substance, delicately suffused blush pink; a dainty and pleasing flower on good strong stems. Certificate of merit.

Pkt., 15c; 1/2 oz., 40c; oz., 75c.

- **ORCHID.** Extra large flowers borne 3 and 4 on long, strong stems; color a true deep Orchid lavender, a new color in sweet peas — Orchid is vigorous free blooming and was awarded a certificate of merit. **Pkt.**, **15c**; **2 pkts.**, **25c**.
- ELFRIDA PEARSON.—Pale pink on white ground, a rare beauty; vigorous and very free blooming; classed as the best pink Spencer by National Sweet Pea Society of England. Pkt., 15c.
- "DUPLEX CREAM." The standards are large, bold and beautifully curved. A vigorous grower and produces many fours. Color a deep rich cream. Per pkt., 10c.

## SWEET PEAS-Continued New Spencers

A Splendid Collection, Including the Best of the Recent Novelties.

THE new "Spencer" type has lovely waved and fluted flowers of gigantic size, and in exquisite colorings, length of stem, and lasting qualities are much superior to the older types. "Spencers," however, are very shy seeders and require much careful selection to develop fixed types. The seed is therefore scarce, and cannot be cheaply produced.

- AMERICA—Spencer. The largest and finest of its class. Pure satiny white, striped and splashed brilliant crimson; 4 flowers of perfect form borne on long stems. **Pkt.**, 10c; ½ oz., 20c.
- APPLE BLOSSOM SPENCER. A truly giant flower; color standard rose with deeper veining, wings light carmine, ground color primrose.
- Pkt., 10c; ½ oz., 20c; oz., 35c. ASTA OHN. Lavender, suffused with mauve; of perfect from, largest size, 4 blossoms on long, strong stems; very vigorous.

Pkt., 10c; ½ oz., 25c; oz., 45c. AURORA SPENCER. Ground color cream white, exquisitely flaked and mottled; rich orange salmon, extra

- arge, free-blooming.
   Pkt., 10c; ½ oz., 20c; oz., 30c.
   CONSTANCE OLIVER. A clear, rich pink on cream ground; of true Spencer
- type; best of its color. Pkt., 10c; ½ oz., 20c; oz., 35c. COUNTESS SPENCER—Pink. The first Sweet Pea of the Spencer type. Flowers extremely large, beautifully
- Flowers extremely large, beautifully expanded, crumpled and waved. Color silvery white, suffused and tinted with soft shell pink, deeper at the outer edges. **Pkt., 10c;** ½ oz., 20c; oz., 35c.
- **DAINTY—Spencer.** A pure, glistening white with distinct margining of bright rose pink; comes four blossoms on long stems. Dainty is all its name implies and is the best picotee edge yet produced; very large and wavy.
- Pkt., 10c; ½ oz., 20c; oz., 35c. ETHEL ROOSEVELT—Spencer. Perfect Spencer form; ground color a pleasing primrose or straw, overlaid with dainty flakes and splashes of blush crimson, giving warmth and golden tinting to the yellowish ground work.
- ing to the yellowish ground work. **Pkt., 10c;** ½ oz., 20c; oz., 30c. **FLORA NORTON.** Bright blue with just a tinge of purple, fine Spencer form.
- Pkt., 10c; ½ oz., 20c; oz., 30c. FLORENCE NIGHTINGALE—Spencer. Finest new lavender of immense size. Bold, erect flowers of charmingly soft, rich lavender with very delicate suffusion of rose; a beautiful, self-colored flower, frilled and waved. Bears four blooms on extra long stems.
- Pkt., 10c; ½ oz., 20c; oz., 30c. GEO. HERBERT. Our own select strain; a bright rosy-carmine, open form, beautifully waved; a magnificent, vigorous Sweet Pea of giant size. Pkt., 10c; ½ oz., 20c; oz., 35c.
- JOHN INGMAN. Rich rose crimson, large flowers of good substance.

Pkt., 10c; ½ oz., 20c; oz., 35c.

NEW "DUPLEX" SPENCER Page 74

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HELEN LEWIS. A glant flower of perfect form; standard rich crimson orange, wings orange rose; open form, full, wavy.

- Pkt., 10c; ½ oz., 20c; oz., 35c. JUANITA. A unique and pleasing combination of pearly gray white ground splashed and striped lavender. Pkt., 10c; ½ oz., 20c; oz., 30c.
- KING EDWARD SPENCER. Bright crimson scarlet, largest size, wavy standard; drooping wings, very long stems; one of the finest bright reds. Pkt., 10c; ½ oz., 20c; oz., 35c.
- MARIE CORELLI.Rosy carmine tinted cherry<br/>red; beautifully waved.Award of merit R. H. S.,<br/>1911Pkt., 15c; ½ oz., 40c; oz., 75c.
- MARJORIE WILLIS. A brilliant rose carmine of the Marie Corelli class and considered a better flower, of the finest Spencer form, the long stems carry four well-placed flowers; one of the best. Pkt., 10c; ½ oz.,30c; oz., 50c.
- **MAUDE HOLMES—Spencer.** A brilliant sunproof crimson of the largest size. Of true Spencer form, wavy and fluted.

Pkt., 10c; ½ oz., 20c; 1 oz., 35c.

**MRS. ROUTZAHN.** Color, a soft straw tinted with blush pink, shading to apricot and rose at the edges, with a distinct rose margin; of immense size; one of the finest Spencers.

Pkt., 10c; 1/2 oz., 25c; oz., 40c.

JOIN THE OREGON SWEET PEA SOCIETY. You may win our beautiful Solid Silver Trophy  $\widehat{Cup}$ -value 60.00-for the best eight Spencer varieties in vases of ten or more stems each. Only amateurs who are members can compete, so every member has a chance to win. The Society's Exhibition in Portland last July was a grand success and the coming show will be one of the big events of the season. If you are a lover of Sweet Peas you should be a member of the Oregon Sweet Pea Society. Fifty cents will pay all dues for one year.

PORTLAND SEED COMPANY'S

## **NEW SPENCERS**—Continued

IRS. WALTER WRIGHT. A distinct bright shade of rosy mauve, extra large, fine flower, MRS. WALTER WRIGHT. waved and ruffled, vigorous and free-flowering

Pkt., 10c; 1/2 oz., 30c; oz., 50c.

**OTHELLO SPENCER.** Very deep maroon of largest Spencer type; wings very wavy, large graceful flower; best of its color.

Pkt., 10c; ½ oz., 20c; oz., 35c.

**PARADISE IVORY.** A grand ivory white Spencer of the finest form. Large flower of good substance on long stems. A vigorous, tall grower.

Pkt., 15c; 1/2 oz., 40c; oz., 65c.

PRIMROSE SPENCER. Color, a true primrose. Very vigorous, free-flowering, excells in beauty of form, length of stem and keeping qualities.

Pkt., 10c; ½ oz., 25c; oz., 45c.

**UEEN ALEXANDRA—Spencer.** We will all welcome Queen Alexandra in Spencer form, as QUEEN ALEXANDRA—Spencer. there is no better bright, intense scarlet, sunproof Sweet Pea. Of large, full, waved form. Freeflowering and vigorous.

Pkt., 10c; ½ oz., 20c; oz., 35c.

RAMONA SPENCER. Pure white with light carmine and blush stripes; large, good form, free-flowering. **Pkt.**, 10c; ½ oz., 20c; oz., 30c.

- SATIN QUEEN SPENCER. A new, delicate glistening pink, shading to a dainty primrose; a most charming flower of graceful poise, large, wavy and ruffled, free-flowering, long stems, a royal beauty. **Pkt.**, **10c**; ½ **oz.**, **20c**; **oz.**, **35c**. **SENATOR—Spencer.** Of finest Spencer form
- and largest size. The coloring is a combination of deep claret and chocolate, striped and flaked on a light heliotrope ground. The coloring, though dark, is brilliant and attractive. A free-flowering, vigorous grower of greatest merit.
- Pkt., 10c; ½ oz., 20c; oz., 30c. THOMAS STEVENSON. The most brilliant orange scarlet, standard of deeper color than the wings. The flowers are of the finest Spencer form
- and generally come four to the stem. Pkt. 20 seeds, 10c; ½ oz., 40c; oz., 75c. VERMILION BRILLIANT. An intense pure scarlet self-color of rare beauty and substance. Absolutely sunproof. Vermilion Brilliant is Absolutely sumption. verified billing is the finest flower of its color. A stocky, vigorous, grower, profuse bloomer, the long, strong stems carry four perfect flowers. Pkt., 15c; ½ oz., 75c.
   WHITE SPENCER. A pure white flower of enormous size, beautifully crinkled and fluted, of
- splendid substance

## "UNWINS "-Splendid New Sweet Peas in This Popular Class.

THE "UNWINS" resemble the Spencer type, although being of entirely different origin. They are not quite so large as the Spencers, but of fine form and substance, very vigorous and free-flowering, and always come true. In this respect they are superior and more dependable than Spencers, which often "sport" in the most unaccountable manner. For substance, color and bloom, Unwins are unsurpassed.

PRICE, except where noted, Pkt., 5c; oz., 25c; ¼ lb., 75c.

- CHRISSIE UNWIN. Beautiful cherry scarlet, self-color, wavy, standard finest form.
- E. J. CASTLE-Crimson Rose. A magnificent open form flower of grandest size and unique coloring, being a rose crimson veined deeper rose, its brilliancy being enhanced by artificial light; fluted border.
- **GLADYS UNWIN-Light Pink.** A large, bold flower, not hooded, but with standard and broad wings, of the new orchid-flower type, this is similar to Countess Spencer, but several shades lighter in its lovely pink color.
- MRS. DUNCAN. A brilliant scarlet similar to King Edward Spencer, but having the Unwin form and habit.
- PRINCE OLAF. A fine new Unwin of largest size. Flaked and striped, blue on a white ground.

- - NORA UNWIN-White. A grand pure white of the same beauty of form, waved and fluted standard and wings as Gladys Unwin. Award of merit at the trials of the N. S. P. S., Reading, England, one of the finest whites.
  - FRANK DOLBY. Color, delicate light lavender of great beauty, bold, wavy standard with widely spreading fluted wings.
  - PHYLLIS UNWIN-Deep Rose. The largest of the Unwin types, beautifully waved and crinkled, standard upright, wings broad. Flowers 3 to 4 on long stems. Color, a rare shade of deep rose, selfcolor.
  - ST. GEORGE. Brilliant orange standard, the large wings a distinct orange carmine; does not burn in the sun; one of the best orange shades.

## **GRANDIFLORA TYPE**

## Select List of Finest Large Flowering Sweet Peas, the Best of Their Color and Type

Prices, unless otherwise stated, 5c per Pkt. 15c per oz.; 40c per ½ lb.; \$1.25 per lb. postpaid.

#### White

DOROTHY ECKFORD. Pronounced by Sweet Pea experts to be the grandest pure white yet seen of the grandiflora type. Grows an enormous mass of bloom.

- Red, Scarlet and Maroon QUEEN ALEXANDRA. An intense bright scarlet of grand substance; a bold, robust flower of giant size and finest form, is sunproof, very vigorous and free-flowering
- A lovely, intense crimson.
   A truly giant flowered variety. The finest crimson to date. Strong stems and growth.
   PRINCE OF WALES. Rose crimson. Fine sort.
   BLACK KNIGHT. Large size; a rich, dark claret,
- almost black; somewhat veined.

#### **Pink and White**

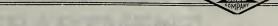
- EARLIEST OF ALL. An improved strain of the very popular Blanche Ferry, beginning to flower fully a week earlier. Blanche Ferry. Standard wide and erect, bright
- rose pink, wings are creamy white, tinted with rose.

#### **Blue and White**

- HELEN PIERCE. The most beautiful bright shade of true blue mottled on a brilliant pure white ground; 3 or 4 blossoms on a long stem. A grand flower of the largest size; very free and vigorous. Oz., 15c; ¼ lb. 50c.
- LOTTIE ECKFORD. Flowers beautifully shaded with light blue on a white ground and boldly edged deep, rich violet; very dainty.



Pkt., 10c; 1/2 oz., 25c; oz., 45c.



#### Finest Large Flowering Sweet Peas-Continued

#### Pink -Deep Shades

- BOLTONS PINK. A rare orange pink of great brilliancy and beauty, not injured by the sun.
- Oz., 15c; 1/4 lb. 35c. JANET SCOTT. A large, grand flower; deep, rich

#### pink.

#### Pink-Light Shades

- COUNTESS of LATHAM. Fine large flowers. soft, cream tint heavily shaded with soft flesh pink in the center of the standard and wings shading much lighter at the edges.
- **DAINTY.** Large flowers, white with pink edge. **LOVELY.** The most beautiful shades of soft shell-
- pink, changing to very light rose at the outer edges. Grand flowers of large size. **PRIMA DONNA.** A most beautiful bright shade
- of blush-pink. Flowers of a large size, and finest form.

#### **Cream or Light Yellow**

- GOLDEN-ROSE. The large flowers are of fine open form, with standard gracefully fluted. A clear crimson yellow, beautifully flushed with rosy pink.
- HON. MRS. E. KENYON. Rich, primrose. A bold, giant flower. The best in this shade. SYBIL ECKFORD. A unique shade of apricot-
- lemon, one of the finest Eckfords. MRS. COLLIER. A true primrose of fine form.

**Double Sweet Peas** 

- **HENOMENAL.** This variety is practically a double Lottie Eckford, being white shaded and PHENOMENAL. edged with blue. The blossoms are large and nearly always double. **Pkt., 10c;** ½ oz., 20c. nearly always double.
- WHITE WONDER. Best double white, often producing 6 or more flowers on long stems; large, freeblooming and vigorous. **Pkt.**, 10c; ½ oz., 20c. **IXED.** These have two or three standards and
- MIXED. frequently three wings. The petals are beautifully incurved and frilled.

Pkt., 5c; oz., 15c; 1/4 lb. 50c; lb., \$1.00

#### Lavender

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- FLORA NORTON. A beautiful rich lavender, free from mauve or pink; large.
- LADY GRISEL HAMILTON. Most attractive light lavender shading; flowers of large size. Oz. 15c; 1/4 lb. 30c.

#### **Blue and Purple**

- **CAPTAIN of the BLUES.** The flowers have the appearance of being a true blue.
- MRS. GEO. HIGGINSON, JR. "sky blue;" good size. A new shade,
- LORD NELSON, or "BRILLIANT BLUE" A brilliant dark navy blue with tips of wings a lighter blue. Giant flowers, slightly hooded.

#### Orange and Salmon

- HENRY ECKFORD. A distinct orange scarlet of the finest form and largest size; as beautiful under artificial lights as in daylight.
- LADY MARY CURRIE. Large, salmon-pink, shaded with carmine; finest of its color.
- MISS WILLMOTT. Described as an "orange pink" delicately shaded rose. Enormous flowers, borne erect on long, stiff stems.
- **VENUS.** Lovely salmon-b pink. Fine, large flowers. Lovely salmon-buff, shaded with rosy
- ROSE DU BARRI. Deep carmine rose and orange. While of the grandiflora type, Rose du Barri is large, full and slightly waved. Pkt., 10c; oz., 25c; ¼ lb., 60c.

#### Striped and Variegated

AMERICA. Bright red on a silvery white ground; showy.

JESSIE CUTHBERTSON. Creamy white striped rich rose; large.

## **Sweet Peas in Mixture**

#### **Diamond Mixture**

This is the most perfect blend of the finest named varieties it is possible to produce. As formerly, this mixture will contain the novelties of the preceding season, and the addition of the rare Spencer types will make this the grandest mixture of new, large-flowering Sweet Peas we have ever offered. It will delight the most critical; if you are undecided as to the varieties or colors you want, buy the "Diamond Mixture."

Sold in 1-oz. sealed pkts. only, at 15c each; 2 for 25c; 12 for \$1.25. Not sold in bulk.

#### Our Superb Mixture-True Spencers Only

A splendid mixture, carefully proportioned and blended to produce pleasing and harmonious com-binations of color, containing the most beautiful shades and variations of the wonderful Spencer type. These are not seedlings, but carefully selected named varieties that retain all their purity and brilliancy of color. Pkt., 10c; oz., 35c; ½ lb., \$1.00; lb., \$3.00.

## **Perennial Peas**

**Or Lathyrus Latifolius** 

In general appearance these are the same as Sweet Peas, but the flowers are not so fragrant, they bloom through a long season, are perfectly hardy and will live for years.

Red, White or Mixed. Pkt., 10c; oz., 35c.

**Special Mixtures to Order** 

If you want to produce any special effect or color scheme, let us know your requirements. We can supply the correct color or mixture.

EXTRA MIXED. Select standard varieties of the finest colors.

Pkt., 5c; oz., 15c; ¼ lb., 40c; ½ lb., 60c; lb., \$1.00

## Sweet Peas-Christmas Flowering

FOR Winter flowers under glass, sow as early as August and in succession as desired. They grow 4 to 5 feet high and will bloom in 60 to 90 days.— Give carnation temperature.

Pkt., 10c; oz., 25c.

PINK BEAUTY. Deep rose pink. Pkt., 10c; oz., 25c. CHRISTMAS PINK. Pink and white.

WALLACEA. New, lavender. Pkt., 10c; oz., 25c. White. MRS. GEO. LEWIS.

Pkt., 10c; oz., 25c

#### Scabiosa

#### Sweet Scabious, or Mourning Bride.

Free-flowering annuals; colors, white, carmine, ac, maroon, etc. Very effective for garden decorlilac, maroon, etc. ation and valuable for cutting.

Dwarf or Tall Double Mixed.

Pkt., 5c; ¼ oz., 15c.

#### Smilax

Charming, tender, perennial climber for greenhouse or window gardens. The foliage and stems are of pleasing light green; very graceful; excellent for Pkt., 10c; 1/4 oz., 25c. decoration. (See Plants).

#### Snapdragon—Antirrhinum

One of the most useful and showy of border plants of almost every color, and striped as beautifully as Carnations. They have recently been much improved and are now really magnificent. Hardy perennial.

Tall, Finest Mixed.	Pkt., 10c; ¼ oz., 25c.
Dwarf, Finest Mixed.	Pkt., 5c; ¼ oz., 25c.
Pure White. Dwarf.	Pkt., 10c; 1/4 oz., 30c.
Firefly. Dwarf; scarlet.	Pkt., 10c; ¼ oz., 30c.

#### Sunflower-Helianthus

Stately growing annuals with immense golden yellow flowers; effective for garden decoration.

Double Dwarf. Covered with three-inch double flowers of brightest golden yellow

Pkt., 5c; oz., 25c. **Globosus** Fistulosus. Saffron, very large, double and handsome. Pkt., 5c; oz., 25c.

Multiflora. Beautiful, double yellow flowers.

Pkt., 5c; oz., 25c. Mammoth Russian. (See Field Seeds) Pkt. 5c.

#### Sweet Rocket—Hesperis

An old hardy, garden favorite. Fragrant white owers; 2 to 3 feet. **Pkt., 5c;** ½ **oz., 15c.** flowers; 2 to 3 feet. Sweet Sultan-See Centaurea, Page 65

#### Sweet William - Dianthus Barbatus

A well-known, remarkably free-flowering plant of brilliant colors, ranging from snow white to darkest crimson and purple. They emit a very delicate and refreshing fragrance. Hardy perennial.

Single Mixed. Very beautiful.

Dunnetti. Dark crimso	Pkt., 5c; ½ oz., 25c.
	Pkt., 5c; ½ oz., 30c.
Pure White. Single.	Pkt., 5c; ½ oz., 30c.
Double Mixed.	Pkt., 10c; ½ oz., 50c.

#### Thunbergia

Rapid-growing annual climbers; splendid for trailing over trellises, fences, etc., beautiful flowers borne in profusion; buff, white, orange, etc., four to six feet high. Mixed Colors.

Pkt., 5c; 1/4 oz., 25c.

#### Tritoma

Sometimes called Red Hot Poker. This is a fine handsome plant. It is hardy, though requiring some protection through the winter. The flowers are produced in large spikes of brilliant rich colors. Cut flowers keep a long time. Half-hardy perennial.

Uvaria. Dazzling orange red. Pkt., 15c.

#### Vinca

Tender perennial.	Fine for pot culture.	Flowers
white and pink.		
Mixed.	Pkt. 10c: 1/ /	oz. 30c

#### Verbena

Very few annuals will make such a gorgeous display during the summer months, or furnish more flowers for cutting, than the Verbena. Start seed in the house or under glass early in the spring and transplant after three or four inches of growth. They flower in July and continue strong and healthy until destroyed by frost.

#### Hybrida Choicest Mixed. Very finest.

Pkt., 10c; ¼ oz., 50c.
elected; extra large, fine.
Pkt., 15c; ¼ oz., 75c.
Pkt., 5c; 1/4 oz., 35c.
vhite.
Pkt., 10c; ¼ oz., 50c.
y Scarlet.
Pkt., 10c; 1/8 oz., 50c.
Pkt., 10c; ¼ oz., 50c.
Pkt 100: 1/07 500

#### Lemon Verbena

Every garden should have a few plants of this fragrant favorite. Its pale green foliage goes well with any flower. Pkt., 10c.

#### Violet

Viola Odorata is the well-known English Violet, a free-flowering, hardy perennial. Easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded moist places.

Finest forcing Violet. Very large. Pkt., 15c; ½ oz., \$1.00. The Czar. Dark blue.

Odorata Blue. Very fragrant. Pkt., 10c; 1/8 oz., 50c.

Odorata White. Very fragrant

Pkt., 10c; 1/8 oz., 50c.

Odorata. Finest Mixed. Pkt., 10c; 1/8 oz., 75c.

#### Valeriana—Garden Heliotrope

Fine border plants; sweet scented flowers. Fine Mixed. Pkt., 5c; 1/4 oz. 20c.

#### Viscaria-Rose of Heaven

Their profuseness of bloom will always rank them among general favorites.

Pkt., 5c; ¼ oz. 15c.

#### Wall Flower-Cheiranthus Cheri

Produces spikes of beautiful, exceedingly fragrant flowers. Half hardy perennials.

Cloth of Gold. Large, fine, single.

Fine Mixed.

Pkt., 10c; ¼ oz., 35c. Goliath. Single, extra large, fine dark brown, very early; fine for forcing. Pkt., 10c; ¼ oz., 50c.

Mixed, Single. Large flowering. Pkt., 5c; ¼ oz., 25c. Parisian Forcing. Single. Pkt., 10c; ¼ oz., 25c Finest Double Mixed. Branching.

Pkt., 10c; 1/8 oz., 75c.

#### Zea-Ornamental Maize

Japonica Variegata.	Finest Mixed. All var-
ieties.	Pkt., 5c; oz., 20c.
Casaillings Mired	Dist Set or 200

#### Zinnia Elegans

Of the easiest cultivation and should be in every collection. Half hardy annuals.

Tall Double Mixed.	Pkt., 5c; ¼ oz., 25c.
Dwarf Double Mixed.	Pkt., 5c; ¼ oz., 25c.
Dwarf Scarlet.	Pkt., 5c; ¼ oz., 25c.

# PLANT DEPARTMENT

Bulbs, Annual and Perennial Garden Plants, Dahlias, Roses, Ferns and Pot Plants

## **Mastodon Pansies**

For Seed and Description see page 71

#### "Mastodon Pansies" in Bloom

From March until June we offer our famous "Mastodon" Pansy plants in full bloom—none finer in the world. Put up one dozen in a basket.

Price, 60c to \$1.00 per basket by express, buyer to pay charges. They will surprise and delight you.

#### **Giant Pansies**

NEW GIANT PANSIES .- Our Giant Plants are in a class of their own and can not be compared to any other Giant Pansies, no matter where grown. We know they are unsurpassed in this or any other country. A trial basket will con-vince you. They are the best value ever offered in a bedding plant.

Each, 5c; per dozen, 50c; by mail, 75c dozen.

#### MASTODON PANSY SEED We offer a limited amount of this hand selected seed, DIAMOND MIXED Large Trade pkt., \$100 Per pkt., 25 cents

# Mastodon ansies

## **BEGONIAS**-Tuberous Rooted

FROM their early first blooming until cut down by frost. Tu-**F** berous Begonias are a mass of bloom of most gorgeous and brilliant coloring. They are distinct and unique, their giant flowers fully six inches in diameter, in wonderful shades giant flowers fully six inclusion discussion of yellow bronze, white, reds, pinks, etc., with thick waxy petals and grand ornamental foliage, never failing to excite the wonder and admiration of all who see them. There are four types, Single, Double, Frilled and Crested.

CULTURE .- The soil should be rich in leaf mould, or well-rotted manure, a little sand being beneficial. Start the bulbs inside in the early Spring, and transplant when danger of frost is past. They should be lifted in the Fall before frost. dried and stored in sand in a cool place.

#### Single Flowering

These are of immense size, erect, flowers of great substance, free blooming and very lasting. Colors, copper, canary, orange, crimson, rose, pink, white and salmon.

Mixed, price, each, 10c; doz., \$1.00; 100, \$6.00 **Double Flowering** 

Many charming effects are found in the double varieties, they being often as full and beautiful as a rose, some of the white varieties resembling giant carnations.

#### Mlxed, each, 15c; doz., \$1.50; 100, \$10.00. Crested.

This remarkable strain comes in all the finest colors, and the flowers are as large as the largest singles. The petals, of great substance, carrying on their upper surface a crested formed cockscomb, which is a very attractive and interesting addition to the flower. Price, separate colors, rose, orange, white, scarlet, dark red, yellow and salmon.

Single, each, 20c; doz., \$2.00; 100, \$15.00. Double, each, 20c; doz., \$2.00; 100, \$15.00.



Our Begonlas and Gloxinlas come from Ghent, Belgium, where the finest bulbs are grown. Frilled

Single frilled Begonias differ from the plain singles only in having the heavy frill of fringe on the edges of the petals. They have the same range of color,

handsome foliage and free flowering habit. Mixed, each, 20c; doz., \$2.00; 100, \$15.00. Mixed

OUR DIAMOND MIXTURE, containing all of Per doz., \$1.50; 100, \$10.00. above sorts.

A good way to start Begonias and Gloxinias is to put the bulbs on a layer of moss in a box or flat, and cover with another layer. Keep moist, but not too wet; temperature about 70 degrees; this starts both top and roots; then pot for root development before transplanting outside PORTLAND SEED COMPANY'S

## IRIS

**M**AGNIFICENT plants for the garden. They bloom profusely and are exceedingly showy and fragrant. The colors are brilliant and cover a wide range of different shades and combinations. In the open ground they are perfectly hardy, increase rapidly and make a magnificent display either in clumps or in borders. They do best in rich, moist soils. If the soil is light, depress the beds a little below their surroundings; this helps to collect and hold the moisture. Plant in the fall or early spring.

#### Japanese Iris (Iris Kaempferi)

Japan Iris is the largest and most wonderful of the Iris family, no flower of any kind surpassing its rare beauty of form, brilliancy and variety of coloring, ranging from snow white through maroon, violet, and deep blue; striped, variegated, veined and blended in the greatest profusion, producing effects that are truly marvelous and indescribable. Blossoms early summer. Japan Iris succeeds best in moist location, but will thrive in any good garden soil. Plant three inches deep, about 4 inches apart; divide the clumps every two years. Fertilize established beds while dormant using stable manure, but do not apply after growth starts. There are hundreds of varieties, from which we have selected the following:

- GEKKA-NO-NAMI-Dense pure white, yellow blotches.
- HO-O-JO-Ruby crimson, primrose blotches, surrounded with white halo.
- HANA-NO-NISHIKI-Brilliant claret red, penciled white, purple orange blotches.
- SOFU-NO-KOI-White splashed, blotched and speckled sky-blue, primrose blotches.
- SHIMOYO-NO-TSUKI-White, yellow blotches at base of petals; 6 large petals.
- UJI-NO-HOTARU-Purple overlaid Mith skyblue, orange blotches, 3 petals.
- YEZO-NISHIKI-Deep rich crimson, mottled and blotched white, 3 standards same color ..
- YOMO-NO-UMI-Lavender blue; distinct and beautiful; 6 petals.
- KUMA-FUNJIN-Purple overlaid with navy blue, 2 standards, very large orange blotches.
- KUMOMA-NO-SORA-White, with a strongly marked sky-blue zone and mottled in the same shade.
- KUMO-ISHO—Purple, margined gray, yellow blotches, surrounded with velvety crimson.

KUMO-NO-OBI-Dark lavender purple, large handsome flower, 3 petals.

NAMED VARIETIES.

Each, 20c; doz., \$2.00; 100, \$15.00.

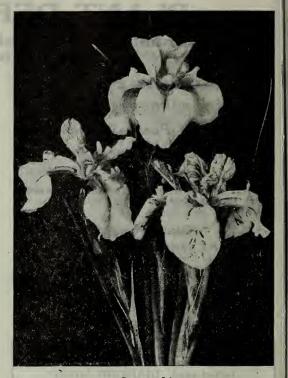
MIXED, GOOD ASSORTMENT. Each 15c; doz., \$1.50; 100, \$10.00.

#### **German Iris**

German Iris is one of the best of the early spring flowers, is hardy everywhere, and if planted in a moist situation or watered freely, will produce magnificent orchid-like blooms of great size and delightful fragrance. Comes in charming color browns, yellows, purples, in blues, effects white.

- PALLIDA DALMATICA—Extra large, lovely true lavender, delightful fragrance, free flowering, fine for massing or as a cut flower.
- FLORENTINE ALBA-White.

- CELESTE—Satiny blue. SPECTABILIS—Violet purple. SHAKESPEARE—Bronze violet.
- MARS-Light yellow and cream.
- CHOICE ROOTS Each, 15c; doz., \$1.50; 100. \$10.00.



German Iris **Spanish** Iris

Spanish Iris is the most useful and satisfactory Iris to grow, requiring no unusual condition or treatment to insure success, grows to perfection in any good garden soil. They are vigorous and hardy, early and free-blooming, keeping well when cut; can also be forced easily, being great favorites with florists.

Spanish Iris comes in the most delicate and beautiful shades and colors from white through dainty blues to lavender, dark blue pure rich yellow, etc. Bulbs are inexpensive and we urge you to plant freely.

Blooms in early June two weeks before the nglish variety. The varieties listed are best of English variety. their colors.

BLANCHE FLEUR—A grand white flower of great substance. The best white for forcing or outdoor culture.

CAJANUS-A magnificent tall golden yellow, free-blooming, good keeper; best yellow Iris in cultivation, either to force or to grow outside.

- COUNT OF NASSAU-The finest dark blue Iris
- Has an agreeable honeysuckle perfume. LOUISE-A beautiful shade of light blue, large,
- splendid flower. EMPEROR-A splendid new light yellow of great
- merit. DARIUS-A pleasing light blue-earliest of all.
- FINEST NAMED VARIETIES.

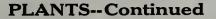
Each, 3c; doz., 30c; 100, \$2.00 MIXED, SELECT, ALL COLORS.

Each, 3c; doz., 20c; 100, \$1.50

#### English Iris (Iris Anglica)

English Iris comes in a marvelous range of colors and variegations, is extremely hardy, growing 18 inches to 28 inches high, coming into bloom just before the Japanese Iris. Like all Iris a moist situation is preferred, but any good soil will grow them splendidly. Plant three to four inches apart. English Iris is one of the best for naturalizing. MOUNT BLANC—Largest and finest. Pure white. Each, 6c; doz., 60c; 100, \$4.00. MIXED. Each, 3c; doz., 30c; 100, \$2.00.

#### COMPLETE SEED ANNUAL



#### Hollyhocks

Hollyhocks require good soil, prepared by deep digging and working in well rotted manure; water during dry weather.

NEW DOUBLE.— Red, yellow, pink, and white. Each, 15c; 4 for 50c; large clumps, each, 25c; dozen, \$2.00.

#### **Oriental Poppy**

The most brilliant and georgeous of all garden plants; is hardy and succeeds well in any good garden soil, blooming in May and June, they are dormant thereafter until cool weather. We offer two rare and beautiful new sorts, besides the standard red type.

**SALMON QUEEN.**—Rich salmon pink with coppery orange suffusion; deepest purplish black center and markings. A rare and splendid flower of largest size; vigorous and free blooming.

Aly Ast Car Cos **MAHONY.**—A magnificent flower of the darkest richest color yet known in a poppy, almost a true dark mahogany. Large, free-blooming; a splendid companion to Salmon Queen.

Each, 25c; doz., \$2.50.

Each, 25c; doz., \$2.50.

KELWAYS HYBRIDS-Among the handsomest of garden plants. Each, 20c; per dozen. \$2.00.

#### **Popular Bedding Plants**

During the months of April and May we have thousands of the following hardy bedding plants, price per dozen by express at buyer's expense:

		description of these					
smos.	30	Heliotrope	50	Petunia	50	Verhena	30
rnations	. 60	Geraniums75c to	2.00	Mignonette	. 50	Stocks	. 30
		Forget-Me-Not					
		English Daisies					

## Hardy Perennial Garden Plants

Once planted require but little care and bloom with increasing beauty each year. Plants marked 15c, are \$1.50 doz.; 20c, \$2.00 doz.; 25c, \$2.50 doz., F. O. B. Portland

- ANEMONE JAPONICA.— Beautiful Fall blooming plants. Pink or white. 20c; 2 sorts, 35c.
- ANCHUSIA ITALICA.—Tall growing hardy plant, with pretty blue flowers in large racemes. Each, 20c.
- ARABIS ALPINA.—(Rock Cress) Low growing. fine for bordering. Covered in Spring with white blossoms. Each, 15c; per dozen, \$1.50.
- CAMPANULA—New Double White.— A dainty and beautiful flower, 2 to 2 ½ feet high, bearing spikes of large snow white, prettily formed, fully double blossoms. Pinch off the old flowers and the plant will bloom continuously. One of the best border or bedding plants ever offered. Each, 25c.
- PLUMBAGO LAIPENTEA.— Fine edging plant growing four inches high and covered all Summer with sky blue flowers. Each, 15c; per doz. \$1.50.
- RUDBECKIA, Golden Glow.— Bears in greatest profusion immense, double blooms, large as Dahlias, of the brightest, golden yellow; hardy everywhere. Each, 15c.
- RUDBECKIA NEWMANI.—(Black-eyed Susan). Golden yellow ray petals around a dark center. Fine cut flowers. Each, 15c.
- COREOPSIS.—(Golden Sunbeams). Beautiful golden-yellow flowers on long stems; always in bloom; fine for cutting. Each, 15c.
- SHASTA DAISY.—(Alaska). This new "Shasta" is covered with immense, fluffy white blooms, with golden eyes, from July until late Fall; long stems; fine for cutting; one of our best hardy border plants. Each, 20c.
- DORONICUM.— Early Spring flowering Marguerite-like yellow flowers. Fine border plant. Each, 20c.

- CANTERBURY BELLS.— Pink, white, blue, large clumps. Each, 20c; doz., \$2.00.
- ENGLISH PRIMROSE.— Finest sorts, from pure yellow to deepest crimson-maroon; early, lowgrowing, fragrant. Each, 20c.
- **GAILLARDIA GRANDIFLORA.**—Splendid large flowers; combination coloring of yellow, brown, crimson, orange; height, 2 feet; bloom until frost; fine for cut flowers; hardy everywhere. **Each**, 20c.
- HELIANTHUS SPARSIFOLIA.—Superb new single sunflower of striking beauty; blooms late in the season. A real gem among hardy plants. We especially urge you to give this a trial. Each, 20c.
- ALYSSUM SAXATILE COMPACTUM.—Bright yellow corymbs; showy Spring flowering plant, which also flowers in Autumn. Each, 20c.
- AQUILEGIA HYBRIDA.—(Columbine). An old favorite for Spring and early Summer. Blue, violet, pink, chocolate. Fine for cut flowers.

Each, 15c.

- HARDY ASTERS.— Among the showiest of late flowering plants, blooming when most other flowers are past. Each, 15c.
- **GYPSOPHILIA PANICULATA.** Single and double; thrives during driest weather; elegant rock plants and very useful for cut flowers.

Each, 20c.

- **GEUM.**—(Attrocinium) A splendid bed or border plant—erect habit — 18 to 24 inches — bearing freely, dainty little double red flowers. **Each, 20c.**
- SWEET WILLIAM.— Old favorites for beds and borders. Brilliant and pleasing colors. Each, 15c.
- VERONICA PROSTRATA.—(Rock Cress). Splendid for rock gardens and edges of borders; color deep blue. Blooms May to August. Each, 15c.
- WALLFLOWER.—(Dark and Light; single and double; mixed), good subjects for rock garden and Spring bedding. Each, 20c.

**PRICES ARE F. O. B. PORTLAND. POSTAGE OR EXPRESS AT BUYER'S EXPENSE** 



## **Perennial Border and Bedding Plants**

A select list of Border and Bedding plants, beautiful and useful varieties that are easily grown. Fine, large, large, well-rooted specimens that can be safely packed and promptly delivered in perfect condition. If you contemplate large plantings or special effects, let us know your plans and requirements. We can supply in any quantity for every requirement at lowest prices.

**HARDY LARKSPUR.**— One of the most beautiful and useful border plants; is a great favorite in the English gardens and their famous specialists have produced magnificent new varieties of rare beauty of form and exquisite coloring; vigorous, free-blooming and hardy. The following list includes the choice hybrid named varieties from a world famous specialist.

Larkspur will grow in any garden soil, but good soil, good drainage, a little bone meal and a little care and cultivation will give ample returns in beauty and perfection of bloom. After the first blooming period, cut the plant close to the ground, work in a little bone meal and the plant will make a new growth and bloom again. This can be repeated if you use manure be sure it is old and does not touch the roots. Plants can be set Fall or Spring.

#### Larkspur–Delphiniums

- ALFRED HENDERSON.—Rich Oxford blue, centre petals plum, large conspicuous white eye, flowers fully 2 inches across. Award of merit, R. H. S.
- AMOS PERRY.—Flowers semi-double, very symmetrical in form, 2½ inches across, of rich, rosy mauve, lined and flushed with sky blue, outer petals sky blue, with a conspicuous black eye.
- AMYAS LEIGH.— Irregular spikes, loosely arranged, of a rich sky blue. The inner petals are very numerous and are of a rich plum, center white and red, flowers 2 ½ inches across.
- **FLYING FOX.**—Bold branching spikes of blue flowers with a faint flush of rose, dark brown eye.
- **GENEVA.** Large flowers of a pleasing shade of light blue, white eye, well adapted for cutting purposes; without a doubt one of the finest light Delphiniums raised. F. C. C., R. H. S.
- MAD. VIOLET GESLIN.— A gem; one of the finest flowers; perfectly round, clear blue, lavender center, bold white eye; flowers 2 inches, and most evenly arranged on stems 5 to 6 feet in height.

- **MARCONI.** Grand spikes of deep sky blue flowers, distinctly veined with rose; center petals tipped with white; late flowering.
- **PERFECTION.** Gigantic flowers nearly 3 inches across; petals loosely arranged, giving the spike a very massive appearance; the color is sky blue, slightly flushed with rose; for cutting one of the best.
- ALBERT EDWARD. Deep plum color; violet edges to the sepal black eye; semi-double.
- LIZZIE.—Magnificent azure blue flowers of largest size, with bold, yellowish eye; large spikes.
- **KING OF DELPHINIUMS.** Giant semi-double flowers, deep blue with white eye; a vigorous, free bloomer.
- **BELLADONNA.** Clear, delicate turquoise, dainty and beautiful; a strong grower, always in flower.
- **DELPHINIUM FORMOSUM.** Dark blue with white center.
- **DELPHINIUM KELWAYS HYBRIDS.** Assorted colors.

PRICES--NAMED VARIETIES-Fine Large 2-year Clumps. Each, 25c; per dozen, \$2.50. Hybrids-Each, 20c; per dozen, \$2.00.

## **Perennial Phlox**

HARDY as an oak, increasing in beauty each year, few things are as beautiful and satisfactory. The marvelous new colors, beautiful foliage and easy culture, make this choice flower one of the most desirable. We offer the following fine collection, which we have grown. Price, each, 15c; doz., \$1.50.

- **R. P. STRUTHERS.** Tall, rosy carmine with claret-red eye; fine.
- EUGENE DANZANVILLIER.— Tall, lilac, shading white towards the edges; large white center.
- MRS. JENKINS.— Tall; the best tall early white for massing.
- **VESUVIUS.** Medium; one of the new seedlings; pure red with bright purple eye; a dazzling color.
- **SUNSHINE.** Dwarf; large, aniline-red with crimson-red eye and light halo.
- GEO. A. STROHLEIN.— Medium bright scarlet with crimson red eye; does not bleach.
- **CARAN D'ACHE.** Medium; geranium-red with old rose shadings and white eye; very effective.
- **MME.** PAUL DUTRIE.—Tall; a delicate lilac rose, reminding one of the beautiful soft pink Orchids.

- **ANTONIN MERCIE.** Medium; light ground color; upper half of each petal deeply suffused bluishlilac, large white halo.
- SELMA.— Tall; large flower; pale rose mauve with claret eye.
- **VON LASSBURG.** Medium; the purest white in cultivation; individual flowers larger than any other white.
- **CONSUL H. FROST.** Medium; pure red with bright French-purple eye.
- **COQUELICOT.** Fine flowering, scarlet, with orimson eye.
- **DIADEM.** Large flowering, pure white dwarf
- GOLIATH.— Truly a giant in growth; color, bright crimson carmine, deeper eye.
- **PHLOX DIVARICATA CANADENSIS.** Blooms early April, has large, beautiful lavender flowers; grows 10 inches high.

For Complete List of Annual and Perennial Plants see pages 79 to 98



Giant New Oriental Poppy SALMON QUEEN Our Own Introduction. LARKSPUR-(Delphinium) Famous new named sorts including the finest Perry Hybrids.

HOLLY HOCKS— Choice new strains in the most pleasing and delicate shades.

PERENNIAL PHLOX-For select list of superb named sorts see page 82.

LARKSPUR, PERENNIAL PHLOX, POPPIES, HOLLYHOCKS made the old fashioned gardens famous and are again coming into great favor. The magnificent new varieties are of great beauty, hardy, of easy culture and once planted make a permanent improvement. We offer fine large clumps sure to bloom the first season. See opposite page.



Above-HORTULANUS FIET; New Paeony Flowered Dahlia MIGNON DWARF wonderful new Paeony Flowered Dahlia. MADAME VON BYSTEIN, Bright Lavender. for Beds and Borders. From Photos made at our Growing Dahlia Exhibit at the State Fair, Salem, Oregon, 1913.



#### "DIAMOND QUALITY" DAHLIAS for 1914

IN THE SELECTION OF DAHLIAS only those varieties of known merit should be considered. The great Dahlia Specialists of Europe and America have set a high standard established by their years of comparative trials and you will have greater satisfaction and better values from their tested varieties which we offer, and which have been officially recognized, than you can possibly obtain from untried varieties of doubtful origin.

**REMEMBER OUR TRIALS ARE VERY EXTENSIVE** and are conducted by a practical Dahlia expert of wide experience. All tests are made in the field without irrigation and the Dahlias we list represent the "survival of the fittest," the best of the standard varieties and meritorious novelties of the most famous producers, varieties that are recognized the world over. They are true to name, erect bloomers and good keepers.

Cannot hope to exhibit them successfully.

## CULTURE

**D**AHLIAS will grow to perfection in any good garden soil, preferably one that contains a little sand. Plant as soon as the frost is gone and the ground warm, cutting the tuber to a single strong eye, and placing it on its side at a depth of about 6 inches, in ground that has been previously well cultivated. An excellent way to start Dahlias is to sprout the tuber in a green house and set out the rooted plants. These are generally believed to give more and better flowers, but is more trouble than planting the bulbs. Rows should be four feet apart, plants 18 inches to 3 feet apart in the row, depending on whether planted for a hedge or for specimen plants. Cultivate thoroughly until ready to bloom, then deep tillage must cease and only the surface be lightly stirred, as deep cultivation at this time is fatal to blooming. Tall varieties should be staked.

If you use commercial fertilizer, do not apply until the plant starts growth, then work it into the top soil, 5 or 6 inches from the plant. Bone meal is an excellent fertilizer for Dahlias but must be applied early. as it is slow in action. When the plant is well up, say 6 to 10 inches, pinch off the top, leaving 2 or three joints, This will cause it to branch out into a more sturdy, bushy growth. Water freely.

PRICES 15c DAHLIAS \$1.50 dozen; 20c Dahlias \$2.00 dozen: 25c Dahlias \$2.50 dozen 35c DAHLIAS \$3.00 dozen; 40c Dahlias \$4.00 dozen; 50c Dahlias \$5.00 dozen

## NEW CACTUS DAHLIAS OF SPECIAL MERIT

- AUGENWEIDE—Cactus—Translated this means "a feast for the eyes," and truly this beautiful cactus dahlia is all its name implies. Color is bright rose with deep rose center, grows erect on fine stems and is a full shapely flower. Each, 50c.
- DR. ROY APPLETON—Cactus—The finest of the straight petal type, of perfect starlike form; color a beautiful light lemon yellow, merging to light salmon, lighter at tips; plants of good habit with long stems and one of the best for exhibition purposes. Each, \$1.00.
- GELBER PRINZ—Cactus—A grand new yellow of Marechal Neil shade, a color never before obtained in a Dahlia. Flowers are extra large, and graceful form, full centers, carried on large stems and keep well both cut and on the bush. Each. 60c.
- **GALATHEA**—Cactus—A delicate soft flesh pink of finest form; a flat petaled type listed in the cactus class by the originator. Galathea is a pleasing and most desirable addition to its class Each, 60c.
- GONDOLA—Beautiful shade of pink; with bright old-gold penciling; large, with long incurved, twisted petals, lighter at tips; great bloomer. Each. 35c.
- GWENDOLINE TUCKER—Cactus—A dainty rose color with lighter center, a finely formed, full flower, petals incurved, carried on long, strong stems. An exhibition variety. Each, 50c.
- JOHN PEEL—Cactus—A deep rich crimson with lighter suffusion toward center; a distinctive form of true Cactus type, a splendid keeper, with fine stems. Each, 75c.
- BISMARK—Cactus—A most intense bright red, petals slightly incurved perfect cactus type, has fine carriage of bloom well above the foliage, is an early and continuous bloomer always covered with flowers, one of the very finest reds. Each, 50c.

- MARATHON—Cactus—A brilliant, purplish maroon; a large, full flower with broad twisted cleft petals — color deeper toward center with light, bright purple shadings on tips and reverse of petals— good stems. Each, 35c.
- **INDOMITABLE—Cactus—**Long, very narrow petals, perfectly incurved; in color a rosy mauve; a beautiful erect flower on good stems.**Each**, **50c**.
- MARGUERITE BOUCHON Brilliant rose with white center and white tips: very strong stems. A dainty and beautiful flower of large size.

Each, \$1.

MARIE PURRIER—Cactus—Extra large brilliant blood-red flower of fine full form, with slender dainty incurved petals; a free bloomer of fine habit of growth, flowers erect and good keepers; a European dahlia of the greatest merit.

Each, 75c.

- RHEINKOENIG—Cactus—(King of the Rhine) Dazzling snow-white of magnificent form and largest size; although large the flowers are daintily formed and of splendid substance, carried above the foliage on fine long stems, and are very lasting when cut. Each. 35c.
- MRS. FERDINAND JEFFRIES Deep velvety garnet red, the long curved and twisted petals forming a magnificent flower of rare grace and beauty; one of the largest dahlias. Each. 75c.
- **PORTOLA—Cactus—**An interesting fancy variety color, pale-pink, margined with clear orange bands; very variable; frequently producing self-color flowers, but pretty in either form. **50c.**
- THE EARL Cactus A rich ruby crimson selfcolor, of large size, with narrow twisted petals interlacing toward the center; an exhibition variety of a distinct type; growth upright and vigorous. Each, \$1.00.

PORTLAND SEED COMPANY'S

## FINEST CACTUS DAHLIAS

From comparative tests in the field we have selected the following as being the best of their types and color. This list contains many of the new Dahlias as well as the best of the older ones.

#### Write for Prices by the Hundred.

#### Red

- BERLICHENGEN—Deep, crimson-carmine; brighter at tips; of the finest form and substance; a true cactus type of rare beauty; very florifer-Each. 25c. 0118.
- BURBANK-Deep rich cardinal red, of finest form and: ubstance, full and free blooming; best of Each. 25c. its color.
- DR. JAMESON—A pleasing dark purplish red, petals rather broad; good, free blooming de-sirable Dahlia. Price, each, 25c.
- DORNROSCHEN-Unique and remarkable, variable from carmine to brilliant red, to delicate formed, ully double flower; long slender petals, beautifully incurved and quilled; large and free blooming; long stems, erect; compact bush. 35c.
- **DREADNAUGHT**—A giant flower, of graceful form, full, with fine claw-shaped petals; color, deep crimson maroon; a good keeper and splendid flower for exhibition, being the finest of its Price, each, 35c. color and class.
- -Rich cardinal H. W. SILLEM—(Cardinal King)red, of perfect form, grand exhibition variety. Each, 25c.

MATCHLESS-Dark rich crimson. Each, 20c.

- MRS. HENRY WIRTH-Rich geranium red, Each, 35c. very free flowering.
- OTHELLO-A glorious full, large flower of deepest richest crimson, center almost black; finest true cactus form; one of the earliest. Ea. 35c.
- **PROGENITOR**—Bright carmine; fringed petals; a free bloomer of great beauty. Each, 20c.
- **ROLAND VON BERLIN-A** fine scarlet of great brilliancy, flowers full and erect; long stems; one of the best. Each, 15c.
- **ROTHER**—Dark rich crimson, very early and free flowering, of vigorous erect habit; bush rather dwarf; flowers of the largest size; perfect cactus type. Each, 15c.
- SIGNAL-Brilliant crimson scarlet; height 24 inches; flowers large, of fine form; free blooming. Each, 25c.
- UNCLE TOM-Dark maroon, medium size; quite free. Each, 15c.
- VULCAN—A brilliant flery vermilion, or orange scarlet, a veritable "hedge of fire," one of the most profuse bloomers, rivalling the Countess of Lonsdale. Vulcan is the ideal hedge Dahlia. Each. 25c.

#### White

- THE BRIDE-Cactus-A distinctive novelty and the daintiest, most beautiful dahlia in its class. "The Bride" is a pure glistening milky white of great substance and of full rounded symmetrical form, grows erect, keeps well cut and the golden variegated foliage is very attractive. Each, 50c.
- IRY-Beautiful clear white, narrow petals, fine form; one of the best; try it. Each. 25c.
- GUNTHER-Pure white with broad twisted petals on stiff stems. Large and beautiful. Each, 60c.
- LAWINE-Fine large white, faint blush tint, erect, free-flowering; extra good. Each, 35c.
- SCHWAN-The giant blooms of a pure glistening white with their narrow, twisted petals have a beauty and elegance not surpassed by any other variety. Blooms early. Each, 25c. other variety. Blooms early.

#### Pink

- BRITTANIA-Beautiful salmon-pink. Each, 25c. COUNTESS OF LONSDALE-Rich, rosy-salmon, very floriferous; one of the best. Each, 25c.
- HELENE-Delicate, clear pink, with rich creamy center, a beautiful flower on very long stems and the greatest bloomer of all. Each, 15c.
- KRIEMHILDE-Blush-pink; a prize winner; one of the finest new Dahlias. Each. 20c.
- MRS. CHAS. FOSTER-Cactus-A beautiful lilac rose with deeper center; full well formed true cactus type with long graceful petals. A splendid grower and good bloomer. Each, 50c.
- PINK PEARL-Deep rich pink; fine form. Each. 25c.
- RUTH FORBES-A pleasing rosy mauve of the broad petaled cactus type; has good stems and makes a fine cut flower. Each, 35c.
- SABA—Bright true pink; a finely formed flower, petals rather broad. Each, 25c.
- **TRAUTLEIB—Cactus—**The dainty coloring of the large, twisted petals, shading from delicate rose with lavender suffusion, to an almost white center make Trautleib a most pleasing and desirable dahlia; a free and constant bloomer. Each 50c
- UNDINE-Lovely light lavender pink of dainty form; a free bloomer. Each, 25c.

#### Lavender

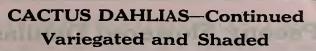
MAUVE QUEEN—A beautiful true lavender with lighter center, full flower with finely quilled petals beautifully formed, incurved. Each. 35c.

#### Yellow and Shaded

- CAPSTAN—Orange-scarlet and apricot; one of the finest for cut flowers; dwarf-habit, freebloomer, large perfect flowers. Each, 15c.
- DESDEMONA-An exquisitely beautiful, daintily formed flower. The central shade is a lovely creamy canary shading to white at the ends of the slender, incurved petals; flowers very full, erect. Each, 50c. borne on long stems.
- GENOVEVA-An elegant distinctive flower of a pale canary yellow, with a beautiful faint green-ish tinge suffusing the entire flower, which is large, with well filled incurving petals. Ea., 35c.
- GOLD REGEN-True cactus type, twisted petals, deep bright yellow; long stiff stems; a splendid Each, 40c. flower.
- LILY SEISMEYER-A rare shade of deep orange buff, with rich light yellow center; a very unusual and beautiful combination. Each, 25. Each, 25.
- MASTER CARL-Bright amber, of giant size and perfect form, immense petals, gracefully Each, 35c. curved; free-blooming, distinctive.
- MISS DOROTHY OLIVER-Pale primrose yellow; long narrow petals; fine form. Each, 35c.
- MODELL-A beautiful clear waxy yellow, with a delicate plum blush sheen over tips of petals; a dainty, lovely flower of large size, perfect form, dainty, petals incurving, erect on long stems; one of the best bloomers and most vigorous growers.

Each, 50c. PRINCE OF YELLOWS-Splendid lemon-yel-

- PRINCE OF
   IELE of the sector of the sect
- VATER RHEIN-Cactus-Handsome flowers, color a rich yellow suffused with salmon red, vig-Each, 50c. orous and free flowering.



**COMET**—Extra large, silvery rose, marked crimson, a very free bloomer, of good habit.**Each**, **25c**.

EFFECTIVE—Chamois rose, yellow shadings. Each, 25c.

RELIABLE—A blending of yellow, brick-red and salmon; truly a grand flower. Each, 25c.

- HARMONIE—A fine full flower, chamois yellow center, outer petals a soft salmon red with lighter tips. Each, 25c.
- WODAN—Cactus—Magnificent flowers of largest size and pleasing form, color orange rose shading to old gold center, very vigorous. Each, 50c.

Decorative Dahlias A Magnificent Collection of the Best of this Superb Type

**PRINCESS JULIANA**—Originating in Holland, received a special award of merit at the Royal Horticultural Society's show in London. and is the most beautiful and useful white Dahlia; flowers are pure white, of perfect form; foliage is rich dark green. A splendid grower and profuse bloomer, the magnificent flowers carried on long, strong stems, will keep for days when cut.

Plants, or tubers, each, 75c.

- KAISERIN AUGUSTA VICTORIA—Magnificent white flowers, of immense size and perfect form, borne erect on long stems. Each, 35c.
- LAVENDER QUEEN—Clear, soft lavender; petals deeply serrated. Each, 15c.
- LE GRAND MANITOU—(Decorative)—Immense perfect flowers, color a white ground splashed and striped with deep violet red; the finest variegated Dahlia in the decorative class. Each, 35c.
- MANITOU—Deep amber, shaded bronze; often 7 inches in diameter. Each, 25c.
- MISS FRANCIS FELL—Silvery white, faint lilac shading on outer petals; strong, erect grower.
- MME. A. LUMIERE—Pure white with violet red points, good. Each, 25c.
- MRS. WINTERS—Snow white, large beautiful form. Each, 20c.
- NAVAJO-Rich, velvety red; splendid sort. Each, 15c.
- **ORANGE KING**—Deep brilliant orange scarlet of finest form, full blooming. **Each**, 15c.
- **SOUVENIR DE GUSTAVE DOAZON**—The largest Dahlia to date; often growing 9 inches in diameter; constant bloomer, magnificent rich scarlet color; the greatest of all Dahlias. **Each**, 25c
- SYLVIA—Splendid pink; floriferous; keeps well. A good dry weather Dahlia. Each. 15c.



- **DELICE**—(Decorative)—Lovely shade of pink, broad petaled flowers with large stiff stems, very floriferous. *A fine, lasting cut flower.* Each, 35c.
- GAIETY—A superb new decorative, vivid scarlet, heavily marked with pure white; stems are long and flowers are produced freely; excellent for cut flowers. Each, 35c.
- JEANNE CHARMET—A beautiful lilac pink; each petal edged with white; flowers are very large and stems exceptionally long; very fine. Height, 4 feet. Each. 25c.

## **Show Dahlias**

The show or "quilled" Dahlia is the popular old fashioned type and has been so improved that many of our most magnificent flowers belong in this class.

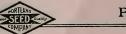
- A D. LIVONI—This grand old variety still remains the best pink of its type. Each, 15c.
- DIADEM—Brillian rich crimson of fine full form, free blooming, has good stems. Each, 25c.
- DREER'S WHITE—A magnificent white of largest size and great purity, long stems. The best of its color. Each, 35c.
- FRANK SMITH—Very dark rich red with light tips, variable; a fine full flower, good grower. Each, 15c.
- GRAND DUKE ALEXIS—A giant glistening clear white flower with the daintiest of lavender flakes or markings near center. Nothing surpassing this magnificent dahlia has ever been produced. Each, 25c.
- JOHN BENNETT—Yellow deeply edged scarlet; a very free bloomer and a desirable color.

Each, 25c.

- THOS. PENDRED—Finest and largest of the pure yellows, a rich soft shade of golden yellow, perfect form, blooms freely and continuously, even in dryest weather. Each, 25c.
- MRS. ROOSEVELT—A beautiful, delicate pink, of immense size, fine stems, perfect form, large and double, superb. Each, 35c.
- NORMA—Pure old gold with delicate plum suffusion that adds to its brilliancy; a full, well formed flower on good stems. Each, 25c.
- W. W. RAWSON—Pure white overlaid with amethyst blue. Petals are quilled toward center but more open at outer part. The massive flowers often measure 7 inches in diameter; borne on stiff erect stems. Each, 50c.

LUCY FAWCETT—Light canary yellow, with penciling of clear magenta. Large and very free. Each, 20c.

Many DAHLIAS not here listed can be supplied on demand—as we grow hundreds of varieties in our trials. Send in your list.



## **Paeony Flowered Dahlias**

**O**RIGINATING in Holland, the Paeony flowered Dahlias have become a great specialty with these famous growers, and the marvelous beauty and magnificence of the new types and varieties fully justify their claims to distinction as the most satisfactory garden Dahlia.

The rare new shades, brilliant coloring, velvety finish and glistening sheen of their petals, their giant size, yet most graceful and pleasing forms are unexcelled by any class of flowers. Too much can not be said in their praise and our splendid assortment of latest European novelties have surpassed out greatest expectations. All have received special certificates of merit at the Amsterdam and Haarlem Shows, and we urge you to make at least a trial planting.

The blossoms are semi-double, of enormous size and the coloring is most brilliant and beautiful. They come in several pleasing forms generally with 3 to 5 rows of petals, which are long and broad, sometimes being beautifully curled and twisted.

Paeony Dahlias bloom more freely than any other class and are very vigorous, growing to a height of 5 to 6 feet, with their flowers on long stems above the foliage.

The three new "Hortulanus" varieties are superb, giant, graceful flowers that approach the decorative type in form and regularity, but are listed in the Paeony Class. We were the first to introduce them in this country.

The following list includes the most popular sorts and best of the recent introductions

- HORTULANUS BUDDE—Opens a clear, bright crimson changing to lovely rich old rose, shading to delicate fawn at tips and margins of the broad, velvety petals. A grand, giant flower, well poised on long strong stems. Special award of merit.
- HORTULANUS FIET—(See color plate, page 84). Bright salmon rose on old gold and orange, lighter toward tips. A magnificent flower of the same general type as Hortulanus Budde. A truly marvelous flower, being a mass of blooms throughout the season. The photo appearing in the color plate shows the plants as they actually bloomed and from which we were cutting every day. First-class certificate. **Each, \$1.50**.
- HORTULANUS WITTE—A wonderful giant white of great beauty, the broad, graceful petals are of good substance and of a glistening pearly, white with fine large stems. Similar in form and size to other Hortulanus varieties. Firstclass certificate. Each, \$1.25.

#### Madam Von Bystein

(See color plate page 84).

- ▲ magnificent lilac lavender, changing to light blue. A dainty, fluffy flower of large size and lovely form; good stems. A graceful, refined flower of a new and beautiful shade. Sure to thrive and please you. **Each**, \$1.50.
- AMERICA—A glowing old rose overlaid with a rich shade of old gold. A shapely, full flower of 7 to 9 inches in diameter, with broad, gracefully twisted petals; flowers erect on long, strong stems. A magnificent and distinctive flower well worthy of the name "AMERICA." First-class certificate Amsterdam, 1912, and Harlem 1912. Each, 31.50.



- JAN OLIESLAGERS—A grand, new clear deep yellow of fine Paeony form. Flowers of good substance, brilliant finish, erect on long stems. Each, \$1.50.
- LA HOLLANDE—Dainty light rose with golden suffusion that deepens toward the center. A large and beautiful flower, good stems Certificate of merit. Each, \$1.50.
- SHERLOCK HOLMES—A pure, lovely lavender self-color entirely free from purple or reddish tints; large, full, gracefully poised flower on extra good stems. One of the most pleasing and distinctive new Dahlias. Each, \$1.50.
- DR. PEARY—Brilliant, dark, velvety garnet red of magnificent form, the large twisted petals producing a brilliant flower of great beauty. The small deep golden center enhancing the brilliancy of the pure self-colored petals. One of the most pleasing of the newer Paeony Dahlias. Flowers well poised on strong stems. Each, \$1.00.
- GLORY OF NYKERK—Dark, violet red, overlaid with blackish crimson. A brilliant and attractive flower of large size and finest Paeony type; good stems, beautiful and distinct foliage. Each, \$1.00.
- ZEPPELIN—A rich, bright lavender of the largest size, well poised on big strong stems. A truly magnificent flower of great beauty. Award of merit. Each, \$1.50.



## PAEONY FLOWERED DAHLIAS-Continued

- ANDREW CARNEGIE—Salmon pink, shaded bronze, center very prominent and rounded; petals are somewhat flat, making it a distinct shape. Height, 4 feet. Each, 50c.
- A. SCHUTTEVAER—White ground with lilac suffusion. A rare and beautiful flower of large size and finest paeony form; erect, good stems. Each. 50c.
- BERTHA VON SUTTNER—Salmon pink, shaded yellow, erect, elegant form. Height 4½ feet. Each, 60c.
- CAESAR—New. This is the finest yellow of the Paeony section, a magnificent semi-double, clear bright yellow, flower of perfect form, borne erect on long stems; a vigorous grower and free bloomer. Height, 4 feet. Each, 50c.
- DR. K. W. VAN GHORKOM—White shaded rose Flowers large and free bloomng. Each. 50c.
- GEISHA—Geisha has a rich, bright golden yellow ground color near center; suffused and heavily marked with clear, bright red, shading toward points of petals into the clear yellow of the ground color; a beautiful deep golden center adds to the harmony of the color scheme which is the most striking and brilliant ever seen in a Dahlia. The immense flowers often attain a width of 10 to 12 inches, and the massive petals are twisted and curled in the most fantastic manner. Each, 50c.
- GERMANIA—A rich, dark, velvety wine color color with suffusion of golden-yellow toward the edges of petals. Germania is freee from the purplish tint that spoils other reds. Plants or tubers. Each, 35c.
- GIANT EDELWEISS—This new type of Dahlia has true cactus petals of enormous length, curving inward at the tips; color a pure glistening velvety white, of great substance; the center is a brilliant golden yellow, a perfect duplicate of the famous Edelweiss of the Alps, on a gigantic scale, hence its name. Flowers are erect above foliage on long stems, a vigorous bloomer, 5 feet. Each. 50c.
- GLORY OF GROENEKAN—Extra large flowers of finest form. Color a splendid golden orange. Strong grower; free-flowering. Plants or tubers. Each, 35c.
- GREAT BRITAIN A magnificent, full petalled flower; color a pleasing light mauve with dark markings towards center. Of the largest size and most graceful Paeony type. First-class certificate Amsterdam Sept. 1912; Harlem Sept. 1912. Each, \$2.00.

#### Dwarf MIGNON Dahlias See Color Plate, page 84

NEW "MIGNON" DAHLIAS—A new Dwarf Type of Single flowered Dahlias growing to a height of about 14 inches. Plants are bushy and symmetrical and produce in the greatest profusion brilliant large flowers of fine substance, borne on long stiff stems high above the foliage. They make a grand garden display and are long keepers when cut. Mignon Dahlias originated in Holland and were awarded 5 first-class certificates and 5 awards of merit at Amsterdam. We offer in four colors: Brilliant Orange, Velvety Crimson, Yellow and Violet.

Price, each, 20c; doz., \$2.00

- H. J. LOVINK—Dainty shade of lilac on white ground shading to clear yellow center. A large and pleasing flower. Each, 75c.
- HUGO DE VRIES—Brownish orange, open form Height 3 feet. Each, 50c.
- KING LEOPOLD—Cream yellow shading to white. Large long stems, good. Height 5 feet. Each, 35c.
- LA FRANCE—The immense flowers resemble in form a large double Paeony; color is a brilliant rose pink similar to that of the La France rose; free flowering. Each, 50c.
- LA RIANTE—Deep pink flowers, long stems, good keepers, distinct garden variety of great value. Each, 35c.
- MANNEHEIM—Soft orange, with golden suffusion fine form. Height 6 feet. Each, 50c.
- OREGON BEAUTY—A seedling from William Agnew, probably crossed with "Twentieth Century." Its rare color—bright fiery scarlet with golden sheen—its very distinctive form, giant size, long stems and vigorous free blooming habit make it indeed a worthy Dahlia for any garden. An Oregon production that will please and surprise you. Price, each, \$1.00.
- **PHILADELPHIA**—In form this is a semi-double cactus of giant size; color, rich reddish-purple with brighter shadings, suffused and marked with white; very free flowering and gay. **Each. 35c**.
- P. W. JANSSEN—A magnificent Dahlia of splendid form and distinctive coloring, being a lovely shade of old rose, marked and suffused with deep, rich golden yellow, a rare and beautiful combination. Extra fine. Each, 35c, postpaid.
- QUEEN EMMA—A bright pink with darker pink penciling and narrow yellow shading in center of petals. Each, 35c.
- QUEEN WILHELMINA—Large, pure white, central petals beautifully twisted and curled; very vigorous and free flowering; one of the finest garden Dahlias. Plants or tubers. Each, 35c.
- RHEINGAU—Large pointed petals, dark brilliant scarlet; immense size. A fitting companion to Giant Edelweiss, being of the same general type. Each, 50c.
- SNOW QUEEN—A fine, pure white, well filled flower, of pleasing form, free blooming, good stems. Height, 4 feet. Each, 35c.
- THE BRIDE—A giant flower of graceful form. Color is silvery white, of full fluffy Paeony type, center petals twisted, good stems. Certificate Amsterdam and Haarlem shows. Price, \$1.50.

#### **Pom Pon Dahlias**

These are pretty little globe shaped flowers on long stems, high above the dwarf foliage, fine for border, keep well when cut. BESSIE—Creamy white, finely quilled. Each, 15c.

- **CATHERINE**—Purest yellow; large. Each, 20c.
- DARKEST OF ALL—Darkest pom-pom; perfect
- flowers. Each, 20c. LITTLE HERMAN—Deep carmine, shaded garnet: tipped white. Each, 20c.
- NERISSA—Soft pink, silvery tint; a beautiful new color. Each, 20c.
- WHITE ASTER—("Guiding Star"). A dainty, graceful, pure white flower with tips of petals cleft, giving a fringed effect. Each, 20c.

A "CYCLE" LAWN MOWER Has a draw cut blade-runs close to the ground-is self sharpening -cannot be bent or warped out of alignment. Cuts All the Grass Right the First Time Over. See page 127

#### PORTLAND SEED COMPANY'S



## **GLADIOLI**

**T**HE newer types are of immense size and exquisite coloring; their grace and attractiveness, ease of cultivation and freedom of bloom are making them universal favorites. They come at a season when there are few other flowers and everyone should grow them.

CULTURE .-- Gladioli may be planted as early as the ground can be worked or as late as June. A sunny situation is preferred. Plant to a depth of 3 to 6 inches, depending on the size of the bulb. Largest bulbs are not always best, as some varieties do not produce large bulbs. Any garden soil will give satisfactory results, but if well enriched, cultivated and freely watered when buds first show, Gladioli will amply repay you for this additional care. If cut when the first bud opens and put in water, the flowers will open perfectly, keep for many days, and the coloring is richer, and more delicate than if left to open on the plant.

## Ten New Gladioli for 1914

Magnificent new and improved varieties from the greatest American and foreign specialists. The choicest selections from our advance trials. For those who are interested in Gladioli this splendid collection will prove a rare treat; their great beauty and brilliancy will attract and enthuse the most casual observer-**Try them.** 

## ENTIRE COLLECTION-TEN VARIETIES

#### 5 NEW RUFFLED GLADIOLI For trial 1 each, 5 sorts, \$1.50

- From the Originator of "Glory." Magnificent Creations of the most Graceful and Refined "Ruffled" Type.
- IVORY.—Medium height, soft ivory white, intensely ruffled. A magnificent companion flower to "Glory". Price, 40c.
- PRIDE OF GOSHEN.—Bright salmon-pink flowers, very large and well pointed, petals heavily ruffled, of great vigor and substance, enormous spikes of beautiful flowers. Price, 30c.
- RUFFLED PRIMULINUS.—Clear Primrose yellow, a splendid new flower of the "Glory" type, the best of its color. Price, 40c.
- WHITE KING.—A giant sulphur white with slight throat markings. A vigorous flower of great beauty. Price, 30c.
- AZALEA.—A lovely satiny pink of good substance and graceful form, shading lighter towards center, bearing a striking resemblance to the Pink Azaleas. **Price, 40c**
- GOV. HANLEY.—Rich cardinal, a little deeper in the throat. A shapely, graceful flower of great beauty, shows 4 to 6 flowers at once. Price, 30c.

- **EUROPA.**—Snow white without a trace of color or shading, the most sensational flower of its class ever produced. Special awards at every European show where exhibited. A grand flower of great beauty and substance. **Price, \$1.00**.
- AMARYLLIS RED.—Best rich crimson, slightly flaked and margined blackish crimson, almost a perfect self, no eye or blotch of any sort. Glorious red. Price, each, 40c.
- NIAGARA— A grand new Gladiolus of the "America" type, the color being a lovely deep cream shading to a canary yellow on the two lower inside petals. The giant flowers measure four and a half inches across and are carried on a large, erect spike. They open freely and contrast beautifully with the broad, dark green foliage. "Niagara" won certificates of merit from the Massachusetts Horticultural Society, Boston, and the Dutch Bulb Society of Haarlem, Holland. Also won the open class award of the American Gladiolus Society for the best yellow. Each, 40c; per doz., \$4.00.
- NEW GARDEN PINK.—One of the finest pinks ever offered, a very choice and distinct shade. Said to surpass "America" in the beauty of its color. **Price, 30c.**

## GLADIOLI-Cont'd

## **12 Beautiful New Gladioli**

#### SPECIAL.- Entire Collection, 12 Bulbs, \$1.85, postpaid.

"GLORY"-Color a delicate cream pink tint with an attractive crimson stripe in the center of each lower petal. The shade is new and the flower is indeed a glorious beauty. Ruffled Gladioli have broad, expanded flowers, paired and faced the same way, borne on strong stalks, 3 ½ feet high, from 4 to 8 flowers open at the same time, petals are exquisitely ruffled and fluted, giving the flower a refined, graceful appearance.

Price, each, 20c; doz., \$1.75.

- AMERICA-Exquisite shade of flesh pink tinted lavender. A grand giant flower, hardy and free blooming.
- Each 10c; doz., 75c; 100, \$4.00 CONTRAST-Intense scarlet with pure white center; one of the grandest, most attractive new flowers.

Price, each, 35c; doz., \$3.75

PRINCEPS-Giant flowers of richest, most brilliant crimson, with fine white blotch on lower petal; the most striking and beautiful of the newer Gladioli; a great favorite with florists. Price, each, 15c; doz., \$1.50

- WILD ROSE-Bright rose or blush tint, of rare beauty; large, free-flowering; forces well. Price, each, 20c; doz., \$1.75
- BARON HULOT-The only true blue Gladioli; a dark indigo shade; very popular
- Price, each, 10c; doz., \$1.00 BLANCHE-A splendid large white flower with but faint markings. One of the best.

Price, each, 25c; doz., \$2.50

HARLEQUIN-White-striped and suffused with rich dark crimson.

Price, each, 20c; doz., \$2.50

- CANARY BIRD-A pleasing bright yellow. Price, each, 10c; doz., \$1.00
- MRS. FRANCES KING-A pleasing light scarlet; fine for forcing. Each, 10c; doz., 70c; 100, \$4.00
- **JANE DIEULAFOY.-**-Creamy white, lower petals stained maroon. A shapely and attractive flower. Price, each, 15c; doz., \$1.50.
- DAWN-RAY-An elegant rose-colored flower with large, clear white center, a most beautiful new Gladiolus. Price, each, 15c; doz., \$1.75

#### Select Named Gladioli, Best of Their Color SPECIAL .- Collection of 8 Varieties, 70c, postpaid.

MAY-Lovely pure white flowers of finest form, with edges flaked crimson.

Price, each, 10c; doz., \$1.00 MME. MONERET—Grand spikes of large delicate rose flowers, with deeper shadings; A fine cut Price, e ch, 10c; doz., \$1.00 flower.

AUGUSTA-Lovely pure white; blue anthers Price, each, 10c; doz., \$1.00

ATTRACTION—Deep crimson, white center. Price, each, 10c; doz., \$1.00

**DIAMOND MIXTURE**—Select named varieties with choicest Childsi Hybrids.

Doz., 75c; 100, \$5.00 GLADIOLI CHILDSI-Of grand size and color, very showy, containing a large per cent of red and dark shades. Doz., 60c; 100, \$4.00 GLADIOLI, FINE MIXED—This mixture will produce a large variety of fine flowers unequalled

Doz., 35c; 100, \$2.50 for the price.

- I. S. HENDRICKSON-Large, beautiful flowers mottled, white and pink; variable. Price, each, 15c; doz., \$1.50
- BRENCHLEYENSIS-Rich vermilion, shading Price, each, 7c; doz., 60c. to scarlet.
- KLONDYKE-Light yellow, crimson maroon blotch. Price, each, 10c; doz., 75c
- SUPERB-Enormous pink, flaked and striped Price, each, 10c; doz., \$1.00 salmon.

#### Mixed Gladioli

GLADIOLI, GROFF'S HYBRIDS-A mixture of Hybrids of all sorts, giving in one bed the greatest range of colors and variations. Doz., 50c; 100, \$4.00

GLADIOLI LEMOINEI-Mostly light shadee, Brilliant and odd and fantastic markings. showy.

Doz., 50c; 100, \$3.00

#### Water Lilies

THESE beautiful and interesting plants can be easily grown in tubs made by cutting a barrel in half and setting one or both halves deep in the ground, to within a few inches of the top. Put in good loam soil, with one-third old manure, or better still is the soil from a swamp or lowland. using one-third of old, well-rotted manure; cover soil with a layer of sand one to two inches deep, allowing for a depth o six inches of water.

Water Lilies like a mild temperature, and still water, and will not succeed where a fountain is playing or where there is a strong or cold inflow.

NYMPHAE.— Hardy white. Single roots 35c, postpaid. Large roots, 75c to \$1.50, prepaid. NYMPHAE.- Hardy yellow; fragrant. Single roots, 50c, prepaid. Large roots, \$1.50, prepaid.

#### **Parrots Feathers**

Produces long trailing sprays of lovely green, finely cut foliage set in symmetrical whorls; plant in a water tight vase or hanging basket, keeping water standing over the surface. A beautiful, thrifty growing, hardy plant. Try it. Good roots, each, 25c; doz., \$2.50.



**REMEMBER** Gladioli will grow in any garden soil, require very little care and bloom profusely at a time when flowers are scarce.



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# Paeonies

THE development and increase in popularity of the Peony has been unparalelled among flowers, and the profusion and duration of bloom, combined with handsome, massive foliage, accomodating habit, and easy culture, render them one of the most popular, hardy plants grown for lawn and garden decoration.

Peonles are always free from disease and insects do not bother them. They are hardy, thrifty growers, bloom freely, and nothing will add more to the beauty and attractivness of the lawn.

#### Paeony Moutan (Tree Peony)

Grows about four feet high forming a small tree-shaped shrub. When this plant becomes well established and is covered with dozens of massive blooms, it presents a magnificent display. We have Crimson, Pink, Scarlet, Rose and Varlegated.

STRONG IMPORTED ROOTS, from

January to May, by express at buyer's expense (too heavy to mail). Each, 75c.

## **PAEONIES**-Double Herbaceous

FESTIVA MAXIMA—This superb variety is easily the most popular and valuable Peony. Its flowers, of rare beauty and great size, are perfectly double, pure white, tipped or flaked with a small crimson spot at center; petals fine as summer silk; finest white in cultivation; strong roots. Each, 75c.

Large specimen plants, \$2.00.

- OFFICINALIS RUBRA—Flowers of a bright scarlet crimson; quite double and globular; very early, rare and fine. Each, 30c.
- OFFICINALIS ALBA—Blooms with Officinalis Rubra; flowers large and handsome. When Alba first opens it is light pink, fading to white as flowers get older. Each, 30c.
- MAD. DE VERNEVILLE—Broad outside petals, sulphur white, with center rosy white, sometimes edged carmine, and beautifully imbricated; an exceptionally fine full flower, with the sweet fragrance of the rose. One of the earliest. Each, 50c.
- **OFFICINALIS ROSEA**—Beautiful bright pink globular flowers, blooms with Officinalis Alba and Rubra. These splendid early bloomers produce fine flowers for Decoration Day.

Each, 30c.

- COURONNE D'OR—A superb white flower of immense size, reflects yellow, center petals bordered carmine, a perfect flower of great beauty, very fragrant, free blooming and vigorous; late. Each, 75c.
- MAD. BREON—A beautiful variety with good growing qualities; flowers outside flesh, center lemon, occasionally carmine tipped when first open; entire flower gradually changing to pure white. Each, 60c.
- DELACHEI—Large full flower of a deep rich crimson, purplish tone; a free blooming thrifty grower, very fragrant; medium to late. Each, 35c.

**DELICATISSIMA**—Light rosy apricot, sometimes mar-

gined carmine red.

Each, 40c.

**POTTSI-ROSEA** — Rich deep rose, lighter center.

Each, 40c.

FRAGRANS — Late; color deep rose; fragrant and a very prolific bloomer; tall grower. Each, 40c.

QUEENS PERFECTION— One of the finest of the creamy flesh whites, large, full and attractive.

Each, 40c.

## Eremurus

HIMALAICUS .- A rare and noble bulbous plant from the Himalayan Mountains, grow 4 to 8 feet high, bearing racemes 2 feet long, of lovely 2 feet pure white flowers as large as a half dollar. Plant about 8 inches deep and protect the young shoots which start early, a few inches of leaves or some light mulching will keep frost from injuring the tips. Price, strong flowering roots, \$1.00 eacg; doz., \$9.00.

DIAMOND LAWN GRASS MIXTURE—Makes an Evergreen, Velvety Turf Write for prices in large lots. See page 52.

#### COMPLETE SEED ANNUAL





WE are extensive growers of Cannas, and the following sorts are newer and better types that will give best results in our climate. Cannas require a rich, moist soil and should not be planted until all danger of frost is past. They are quick growers and the new flowering sorts bloom continuously until frost. Inexpensive, these charming ornamental plants produce rich tropical effects that cannot be excelled, and the grand new varieties offered are equally valuable for the beauty of their bloom. Let us know your requirements. We can supply the correct variety.

Prices, except where noted: Bulbs or plants in season, each, 20c; dozen, \$2.00, postpaid.

- ALICE ROOSEVELT—Deep crimson, compact green foliage; similar and superior to Alphonse Bouvier. Height 4 to 5 feet.
- **KING HUMBERT**—In this grand new orchidflowered Italian Canna we have a combination of the highest type of flower with the finest bronze foliage. Its mammoth flowers, in heavy trusses, are a brilliant orange-scarlet, with bright red markings, foliage is broad and massive and of a rich coppery bronze with brownish green markings; bold and effective; has no equal; 5 to 6 feet.
- MT. BLANC—A compact vigorous grower, producing a massive spike of large, pure white flowers carried well above the glossy green foliage.
- FEURMEER—A magnificent clear bright red, flowers and spikes of large size and freely produced; foliage deep green. Height, about 5 feet. One of the very finest reds.
- **STUTTGARTIA**—The large flowers are a brilliant orange-scarlet with bright yellow band and markings. Flower spikes strong and erect above the foliage which is broad leaved, dark green and very luxuriant. Height, 4 to 5 feet.
- MRS. ALFRED F. CONARD—Flowers are a superb salmon pink of large size borne very freely and continuously on large, erect spikes; very luxuriant green foliage; height about 4 feet.

- W. E. COTTRELL—Pink, suffused orange; foliage green, margined brown; 3 ½ feet; fine. Price, each 25c; doz., \$2.50.
- LOUISIANA—A strong, vigorous grower, producing a dense mass of glossy green foliage and vivid orange-scarlet flowers of mammoth size; Orchid type; height 4 to 5 feet.
- **ROSEA GIGANTEA**—Finest of the new pinks, the rich, deep rose-colored flowers often measuring five inches across are borne in the greatest profusion, nothing finer has ever been offered foliage green; 4 to 5 feet.
- FLORENCE VAUGHAN—We offer a new seedling of this most famous canna that is a distinct improvement in growth, vigor and bloom; the color and markings are about the same only more brilliant and beautiful; a deep, bright yellow mottled and marked with bright red. Green foliage. Height, 4 to 5 feet.
- **NEW CHICAGO**—A brilliant clear scarlet that holds its color; free-blooming and very vigorous full foliaged plant; a most desirable sort. Height 4 to 5 feet.
- **CARL LUTZ**—New. A splendid bright rich yellow of finest form; foliage leathery and luxuriant. A fine, upright grower and profuse bloomer. Height, 3 ½ feet.

#### Miscellaneous Ornamentals

#### Yucca

SPANISH BAYONET OR ADAM'S NEEDLE-

Has a fine appearance; the stems grow two or three feet above the ground; covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork.

FILAMENTOSA—Thread leaved, creamy white; July. Plants, 2 feet, each, 75c to \$1.00.

#### **Bleeding Heart**

**SPECTABILIS.** One of the most ornamental of hardy spring flowering plants, with elegant green foliage and long, drooping racemes of heartshaped flowers. This is deemed one of the finest of all hardy garden plants.

Strong roots ...... Each, 30c, postpaid.

#### **Pampas Grass**

A noble ornamental grass, easily grown, producing long, pointed leaves and majestic, silvery white plumes, which are very valuable for winter decoration; grows 6 to 8 feet high.

> Strong roots, each, 60c to 75c. Large specimen plants, \$2.00 to \$5.00.

#### Tritoma-(Pfitzeri)

#### **Everblooming Flame Flower or Red Hot Poker**

This new sort is of a rich orange-scarlet, blooming from mid-summer to latest fall; spikes 3 to 4 feet high; one of the very best of this useful class, which is hardy with slight protection, but winter best if lifted and stored in sand. These hardy perennials are unsurpassed as border plants or for mass effects.

Strong flowering roots 25c; doz., \$2.50 prepaid

#### St. Johns Wort--Clump

Low growing with yellow blooms; a drougth resister. July and August. Clumps, 50c.



Pampas Grass

#### Caladium

**Esculentum**—(Elephant's Ear) Grand tropical looking plant. A favorite for specimens on the lawn, or for bordering large sub-tropical groups. In deep, rich soil, if freely watered, they produce enormous leaves, frequently four feet long by three feet wide. Plant in the spring. Height, 4 to 5 feet. **Each, 25c: doz., \$2.00**  Standard varieties for bedding--large plants \$1.00 to \$3.00 per Doz.

## GERANIUMS

FOR 1914 we offer a splendid collection of superb free flowering Geraniums that will please the most critical. No other flower can take their place as a bed or border plant, and inside they grow beautifully throughout the year, making cheery house plants. Our low prices place these choice new varieties within reach of everyone.

#### **Choice New Single** Geraniums

#### Price, 15c each; set of 8 sorts, \$1.00.

ADMIRATION .- Gorgeous flowers of a bright shrimp pink, shading to white center. Immense trusses of beautifully formed flowers. **LBION.**— Beautiful free flowering white variety,

as pure as driven snow. Always in bloom. BARBARA HOPE.— Very large, round florets in immense trusses. Color rich salmon shades to apricot; very distinct.

EMANUEL ARENE .- Rich, dark velvety crimson macu-

- lated orange-red; immense trusses, very strong grower. **MRS. BROWN POTTER.** The most beautiful clear pink variety that we know of. Fine free grower and continuous bloomer.
- JULIA MARLOWE.— Large, round flowered variety of the greatest merit. Color rich, bright scarlet of vel-vety texture. Broad, overlapping petals, forming very large, round florets in immense trusses.
- **NUIT POITEVINE.** Trusses and florets of grand size; rich, rosy violet; the upper petals feathered with scar-let at their base. Very distinct and much admired. **VICTOR GROSSETT.** Rich apricot bordered on
- vermilion; profuse bloomer and excellent habit. splendid bedding sort.

## **Twelve Fine Single Geraniums**

Price, 10c each; \$1.00 per doz. Set of 12 sorts, \$1.00.

- BELLEROPHON .- One of the freest blooming single scarlet bedding varieties; rich, glowing scarlet, crimson maroon shading on upper petals.
- EDWARD MOLLIN .- Immense trusses of a beautiful salmon flesh color. A glorious variety. JAMES KELWAY.— Brilliant scarlet, of the most
- dazzling shade; very large trusses and florets. JACQUERIE.— Rich, vivid crimson; immense
- trusses MAD. CHAPOTAN .- Delicate light pink, large flowers; nice foliage; specially desirable as a pot
- plant MILDRED RIVAL .- Pure rose pink, with conspicuous white blotch on two upper petals.
- MAXINE KAVOLESKI .- Odd shade of orange red; very distinctive, splendid bedder, vigorous handsome; a dependable sort.
- MRS. E. G. HILL .- Very large trusses of single florets; color clear salmon, with a white center.
- MRS. J. M. GARR .- Trusses large and of perfect form; color pure snowy white. MRS. A. BLANC.— Light salmon, blended with
- darker shades; center and edge of petals pure white; extra fine.
- SAM SLOANE .- An extra fine velvety crimson maroon, carrying immense trusses.

TIFFIN .- Brilliant scarlet of the most dazzling shade; very large trusses and florets.

## Pelargoniums-Lady Washington Geraniums

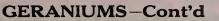
- EASTER GREETING .-- Beautiful new variety, remarkable for its free blooming proclivities, being equally as fine bedded out as it is grown as a pot plant. The flowers are of a flery amaranth red each petal distinctly blotched maroon. Each, 30c. novelty of the greatest merit.
- MRS.LAYAL.— This is the popular pansy ger-anium covered with its small, rich colored flowers in chocolate, pink and white. Each, 20c.

We offer a splendid assortment of the popular Lady Washington Geraniums, large sizes for bedding. \$1.50 to \$3.50 per doz.

## **Eight Choice New Double Geraniums**

Price, 15c each; set of 8 sorts, \$1.00.

- ABBIE SCHAEFER.- Beautifully formed florets in fine, large trusses; color, rich crimson-scarlet, of velvety texture. One of our finest new sorts.
- DAGATA.-- Beautiful mauve rose, with large white blotches at base of petals. Trusses of remarkable size and produced in greatest profusion.
- E. H. TREGO.—A most beautiful shade of dazzling scarlet, with an exquisitely soft, velvety finish. M. ANATOLE ROSELEUR.— A charming shade
- of rose-pink, with decided white eye; habit excellent; semi-dwarf; strong grower; clear foliage; anexcellent bedder.
- MME RECAMIER .- Snow white; strong, vigor ous grower; flowers abundantly produced in large trusses
- MRS. VINCENT .- Bright carmine, each petal marked white at center; dwarf, robust habit; very free in growth and bloom.
- MAUNA LOA.— Beautiful and attractive shade of russet-orange; splendid, slightly zoned foliage and fine habit of growth. A talking variety.
- SEDUCLEUR .- Rich, bright salmon-pink, shaded to white. Trusses of fine size and form. A grand bedding variety.



#### **Twelve Fine Double Geraniums**

Price, 10c each; \$1.00 per doz.; set of 12 sorts, \$1.00. Postpaid.

- ALPHONSE RICARD .-- Immense trusses of large round flowers of the most vivid scarlet.
- BERTHA PRESSILY .- Exquisite silvery pink, large flowers; one of the best. BEAUTE POITEVINE.— Very large, semi-double
- flowers of a brilliant salmon color. One of our best sorts.
- FRANCOIS MAGNARD .- Fine, bright magenta shade, flowering very freely in large trusses of well-opened flowers.
- FRANCIS PERKINS .- The finest pure pink variety we know of.
- GOLDEN DAWN .- Color brilliant orange with brighter shadings; the nearest approach to yellow.

- HETERANTHE .- A fine bedding variety. Color, bright vermilion-red, of a most pleasing shade.
- JOHN DOYLE.— Very large and full trusses of double bright, velvety scarlet flowers.
- LA FAVORITE .-- Trusses very large; flowers pure snow white.
- LE CID .- Lovely rich scarlet flowers; very large trusses.
- MME. JAULIN. A truss of grand size, delicate pink, bordered with pure white.
- S. A. NUTT .- The best of the rich, dark crimson varieties; trusses massive.

#### Superb New Japanese Chrysanthemums Price: 15c each; set of 10 sorts, \$1.25. Postpaid.

- CHRYSOLORA.-- In our field trials during the past season this variety stood out pre-eminently as the finest yellow in the collection. Large, incurved flowers of elegant form.
- CHARLES RASER.— Elegant, snow-white, in-curved blooms of fine size and build. Comes on long, stout stems grandly clothed with luxuriant foliage. One of the finest new sorts.
- C. H. TOTTY .-- Large, fluffy flowers of a glowing chestnut scarlet; reverse of petals shaded gold. This grand sort impresses us as being the very finest red variety to date. Simply superb.
- MRS. DAVID SYME. Another grand incurved white variety, which we esteem highly. Flowers massive, with heavy, broad petals interlacing in center of flower; outer petals falling in graceful manner.
- MRS. W. E. KELLY .- Flowers rich, golden yellow, of massive size and build, with petals very broad and heavy; of elegant form and always on stout stems. One of the finest new yellows.
- MRS. WM. ARNOLD .- Immense white globes as deep as wide. Petals broad, twisting and curling into a most beautiful flower. One of our finest exhibition varieties.
- MATCHLESS .- Largest and most beautiful dark crimson scarlet yet raised; looks like crimson velvet; the color long desired. Superb in the garden.
- PIONEER.-- Color a beautiful shade of Enchantress, or flesh pink. Perfectly incurved flowers of remarkable waxy appearance. Sturdy grower with handsome, leathery foliage. A fine thing.



ROMAN GOLD .- In this fine variety we have secured a sort which for richness to date. Comes shaded with bronze in cool weather.

WELLS PINK .- Another superb new pink variety bearing profusely large flowers of a fluffy reflexed form. Grand foliage and stem. A fine cut flower variety.

#### **Twelve Finest Exhibition Chrysanthemums** Price, 10c each; set of 12 sorts, \$1.00. Postpaid.

- ADONIS .- Immense globes of silvery pink, narrow petals reflexing and interlacing most beautifully and forming an enormous flower of great depth. Of silky finish.
- BRUTUS .- Beautifully formed flowers of a rich chestnut red, reverse of petals gold. One of the finest dark colored varieties. **DIRECTOR GIRARD.**— Rich tawny yellow and
- golden bronze; very large reflexed petals. One of the finest for exhibition.
- **CLEMENTINE TOUSET.** Creamy white, deli-cately laced with lilac and lavender; petals beautifully twisted and arranged. Fine large flower
- COLONEL APPLETON .- Rich, golden yellow, immense size, very double; a grand, well-built flower, with splendid stem and foliage. A sure prize-winner.
- DR. ENGUHARD .- Flowers delicate pearl-pink; large, beautifully incurved; very double and of exquisite form.

- GEORGE W. CHILDS .- Largest and most beaucrimson velvet; the color long desired.
- MAJOR BONNAFFON.— Soft, clear yellow, full in the center, eight inches in diameter and nearly as deep; perfect form. MRS. HENRY ROBINSON.- Snowy white, of
- perfect incurved form, very large; this is undoubtedly one of the most useful varieties ever introduced.
- **POLYPHENE.** A gem in every sense of the word; magnificent in size, form and color. Its informal character of build and rich canary yellow color need only to be seen to be appreciated.
- THE QUEEN.— Broad, heavy, incurved petals, of snowy whiteness. A queen among Chrysanthemums. TIMOTHY EATON.— The largest globular Jap-
- anese incurved variety yet raised. Form round and perfect; color, creamy white; growth, vigorous, with large, dark green foliage.

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## **Eight Choice Novelties in Carnations**

"American Carnation Culture" Lamborn \$2.00 Postpaid



**ROSETTE.**— A giant among Carnations, being of very rank growth and producing all season long its very large cerise-colored flowers in great freedom. One of the finest sorts extant.

**ST. NICHOLAS.**— Rich, velvety scarlet flowers of large size, nicely fringed and fragrant. Growth very strong and upright. One of our finest sorts. **C**ARNATIONS will thrive in any good fresh garden soil After danger of frost is over, set 10 to 12 inches apart each way, cultivate and water as needed until they begin blooming, then mulch with light manure that has straw in it, plants should be staked or strung to support them. Carnations are easily grown in the house for Winter flowers.

For Finest Carnation Seed See Page 51

#### Price, 20c each; set of 8 sorts, \$1.25 postpaid

- **BONORA.** A beauty; fancy variety of fine size and form, borne on long, stout stems. Color white flaked and splashed with red.
- **COMMODORE.** A splendid new scarlet Carnation which blooms throughout a long season. Flowers large, finely formed, delightfully scented and produced on long stems. No finer sort of this color is to be had.
- GLORIOSA.— This variety has been greatly admired wherever it has been seen for its desirable color, being a beautiful delicate shade of pink; flowers of large size and very freely produced.
- **PINK DELIGHT.** A grand new variety bearing profusely on long stems, crisp wax-like flowers of a delicate flesh pink shade. A beauty.
- **POCAHONTAS.** The largest and best of its color, a bright, dazzling crimson. Flowers often measure three inches in diameter, and are well supported on long stiff stems. A wonderfully free bloomer, always full of buds.
- **WHITE WONDER.** A beautiful pure white, of excellent texture and extreme size. Very free flowering with blooms conspicuously displayed above the foliage.

## **Standard Everblooming Carnations**

Price: 15c each; 4 for 50c; set of 12 fine varieties, \$1.25, postpaid.

- **AFTERGLOW.** Flowers of excellent form, produced on long, wiry stems; a beautiful shade of deep cerise, a popular shade in Carnations at present.
- **BEACON.** A bright, deep scarlet; a most perfect color, soft yet brilliant; the flower is of the largest size and perfectly double; nicely fringed; sweet.
- **BOUNTIFUL.** Color pearly white, very large, with heavy glistening petals, delicately fringed; very fragrant.
- **ELDORADO.** Deep golden yellow, splashed and striped with red; a very rich combination of colors and a novelty of much merit.
- **DOROTHY GORDON.** Very large, rose-pink flowers on fine long stems. A beauty.
- ENCHANTRESS.— Flowers very large, borne on long stems. The color is a superb shade of flesh pink. An early and continuous bloomer.

- **MAY DAY.** This Carnation has that exquisite shade of pink so greatly in demand. Form, size and calyx grand.
- and calyx grand. **MRS. C. W. WARD.**— Simply superb, both in form and color; brilliant dark pink, of immense size.
- **PRESIDENT ROOSEVELT.** Magnificent, bright rich crimson; large, perfectly double flowers.
- **VICTORY.** Regarded by many as the finest scarlet Carnation. In color it is the most intensely brilliant scarlet; stems long and firm, holding the flowers upright.
- **WHITE ENCHANTRESS.** A pure white sport from the famous variety Enchantress, having the same general habit and characteristics. A superb flower.
- **WINSOR.** This variety has been greatly admired wherever it has been seen for its desirable color, being a beautiful delicate shade of pink; flowers of large size and very freely produced; plant of grand habit and vigorous growth.

**FLORISTS** write for prices on Carnation Plants. We can supply best commercial varieties in season, or will grow to your order, any special variety. Large, healthy, well rooted plants at right prices.

FEED YOUR PLANTS --- Diamond Plant Food is the proper diet, makes them grow, improves their color and lasting qualities. A 25c package feeds a dozen large house plants a whole year---See page 59.

## Six Beautiful Flowering Begonias

Price, 10c each; set of 6 sorts, 50c, postpaid.

- ALBA PICTA.— A strong growing variety, with pointed dark green leaves; profusely covered with pure white spots. Pretty white flowers.
- ARGENTEA GUTTATA.— Handsome erect grow ing sort, with pointed wine-colored leaves with silvery white spots; clusters of pure white flow-ers on the tips of the stems.
- CUPREA.- A fine, erect Begonia, with dark, rough leaves. The panicles of unopened flowers are bright red with surfaces like plush.
- FOLIOSA .- The freest-flowering Begonia we have. Makes a handsome window plant, with its glossy green leaves and bright pink flowers.
- MARGUERITE .- Bronzy green, with purple cast; large trusses of cream and rose-colored flowers.

INCARNATA .- A strong, vigorous growing sort, bearing immense pendants of pretty pink flow-ers. A splendid Winter-blooming variety.

## **REX BEGONIA**

Grown for the beauty of their foliage. The leaves are large, variegated and margined with a peculiar silver-metallic gloss. The most ornamen-tal of window plants; also useful in baskets and vases. We offer twenty of the most distinct and handsomely marked varieties.

Price, choice plants, each, 25c.

#### **Free Blooming Fuchsias**

Price, 10c each; set of 6 sorts, 50c.

- ANNA EARLE .- Tube and sepals waxy white; corolla single, clear carmine; plants splendid and free blooming.
- DR. BROOKS.— Rich, dark blue corolla, with crimson petals. A beautiful variety. MOLESWORTH.— Fine, large and elegant form,
- sepals long and reflexed, pure red; corolla large double white.
- GENERAL ROBERTS .- Flowers very large; co rolla plum color; tube and sepals crimson. JUPITER.— This is a grand mammoth double
- flowered Fuchsia; flowers of enormous size, very large, rich purple violet corolla; tube and sepals bright crimson.

SNOWSTORM .- The freest flowering double white variety.

#### New Heliotropes Price, 15c each; set of 4, 50c, postpaid.

- ALBATROSS.— Elegant dwarf, bushy growing, new variety of great merit; large panicles of pure white flowers in great profusion all season: the best white variety to date.
- **HEAVENLY BLUE.** Large, close panicles of ex-quisite light blue flowers, with a white eye. Grows vigorously and flowers abundantly; very fine for bedding, for which purpose we offer it at \$1.00 per dozen.

## **Miscellaneous** Flowering Plants

- ABUTILON ECLIPSE .- Handsome variegated foliage and bright pendant flowers of scarlet and gold colors. Fine for vases and hanging baskets. Each, 15c.
- ABUTILON SAVITZI .- Elegant compact growing plant with pretty fringed foliage of a bright green color, distinctly edged with snow white. Equally desirable as a house plant as it is for
- bedding purposes. Each, 15c. CINNAMON VINE.— A beautiful vine of rapid growth, suitable for porches, trellises, etc. One of the very best quick-growing vines. Large roots, 10c each; 3 for 25c.
- GENISTA RACEMOSA.—(Shower of Gold). Ele-gant Spring blooming window plant, literally covered with golden yellow leaves. Each, 15c.
- COLEUS .- Fancy Leaved Coleus are the most important of all the fancy leaved bedding plants. They also make very fine pot plants, especially if you have a warm room to Winter them in. Our collection is strictly up to date.
- Each, 10c; 6 fine sorts, 50c. GERMAN IVY .- Waxy green leaves, strong growing vine for window and porch boxes or for hanging baskets. Each, 10c.
- LANTANA, RED AND GOLD.— Grows eight inches high and is covered all Summer long with Cerlarge umbels of red and yellow flowers. tainly a fine Summer flowering plant.
- Each, 10c; 12 plants for \$1.00. LOBELIA, KATHLEEN MALLARD .- Covered all Summer long with very large, double flowers of an intense deep blue color. Grand for planting near the edge of flower beds

Each, 10c; per dozen, \$1.00.

- LAVENDER QUEEN .- Enormous florets, very large trusses of bloom; color, a beautiful shade of lavender, suffused with rosy mauve. A dwarf, robust grower and a free and continuous bloomer. **ROYAL PURPLE.** Very large and fragrant; color
- deep violet purple, with white eye; very florif-erous and can not be too highly recommended for bedding, for which purpose we offer it at \$1.00 per dozen.
- MARGUERITE, MRS. SANDERS.— A beauti-ful new variety of the Paris Daisy. Pure white flowers all season long. Each, 15c.
- MESEMBRYANTHEMUM SPECTABILIS. Quilled shaped, succulent leaves with large single thistle-like cerise pink flowers. Fine for bas-kets, vases or porch boxes. Each, 10c.
- DOUBLE PETUNIAS .- Double Petunias make excellent bedding plants, as well as being suit-able for pots and vases. Like the single Petunias they bloom continuously all through the season; the flowers, however, are far more beautiful, being larger, quite double, and finely fringed.
- Each, 10c; 6 sorts, all different, 50c. PRIMROSE.—(Giant Obconica). The freest flowering plant we know of, blooming continuously throughout the entire season. Each, 20c.
- SALVIA.—(New Zurich). A distinct and attractive variety of compact dwarf growth, of neatly rounded form, closely set with stiffly erect spikes of the bright scarlet flowers.

- Each, 10c; per doz., \$1.00. SMILAX.— For using as a green with cut flowers. Fine as a parlor or window plant. Each, 10c.
- VINCA VARIEGATA.— Leaves are a glossy green, broadly margined a creamy white. trailing plants for window boxes. The best of

Each, 15c; 2 for 25c.

- VIOLETS .- Sweet scented double and single varieties. Each, 10c; 3 for 25c. VERBENA.—(New Mammoth). The Verbena is,
- next to the Geranium, the most popular of all bedding plants.. Each, 8c; 7 fine varietles, all different, 50c.

Perennial Bed and Border Plants -- See Page 81



E offer a splendid list of Ferns, including some of the newest varieties as well as the older sorts. All plants are in fine growing condition, and well rooted. Florists wishing stock of the new varieties write for prices.

## Nephrolepis or Boston Ferns **SCOTT FERN.**—(*Nephrolepis Scottii*)—Identica with the original Boston type, but is dwarfed

- N. AMERPOHLII.— This charming "Lace Fern" is so finely "crested" as to have a fluffy lacelike appearance that makes it the most beautiful and attractive "sport" that has yet been devel-oped from the Boston Fern. The growth is rather dwarf and bushy, making an ideal plant for house or table decoration. Price from 4-in. pots, 60c.
- OSTON FERN.— This is the original and well known type of "Sword Fern," so popular as a **BOSTON FERN.**hardy house plant.

Nice plants, each, 20c; large plants, each, 35c to 50c; specimen plants, \$1.50 to \$3.00.

## **New and Popular Ferns**

\$2.50 to \$3.00.

ASPARAGUS PLUMOSUS.-(Climbing Lace Fern). A finer and more delicate plant than the Sprengerii, but hardy and easily grown; very satisfactory for window and house culture; the fronds retain their freshness for weeks when cut; fine for floral decorations.

#### Nice plants, each, 15c; large plants, 25c to 50c.

#### ASPARAGUS SPRENGERII.-(Emerald Feather) Handsome and valuable evergreen trailing plant for the house or conservatory; its beautiful sprays

of lovely green, feathery foliage can be cut freely. Nice plants, each, 15c; large plants, 35c to 50c.

BIRDS NEST.—(As plenium Nidus Avis). A rare and beatiful fern with broad outer leaves; center curiously formed like a nest; color is deep green; an attractive pot plant for exhibition. Well-grown specimens from 4-inch pots, \$1.50, postpaid.

MAIDEN HAIR.—(Adiantum Croweanum). This is the hardy Maiden Hair Fern so valuable to florists for cutting, grows freely under almost any condition inside, and if you have not been successful with "Maiden Hair" ferns as a pot plant, try this one; it is a sure grower.

with a more compact and bushy habit of growth. Price, from 4-inch pots, 60c, postpaid. **OSTRICH PLUME FERN.**—(Nephrolepis Whit-

mani). One of the most wonderful and beautiful

introductions of the present age; this new sort

is a sport from the well known Boston Fern; has a beautiful feathery appearance, and is one of

Nice plants, 20c to 35c each; specimen plants,

the grandest of decorative house plants.

Good plants from 4-inch pots, \$1.00 postpaid. FOR FERN DISHES .- Attractive assortments, sufficient for 5 to 6 inch pans. 75c to \$1.00 postp'd.

#### **Japanese Fern Balls**

**DIRECTIONS FOR STARTING.**— Place ball in water for 15 minutes, and then suspend in any desired position, or place in a shallow dish; repeat every two days until growth is started, after which sprinkle occasionally as required. They need very little sun.

Price of Balls in dormant state, large size, each, 75c; small, 50c.

## SPECIAL-Six Fine Table Ferns for \$1.00

Price 20c each; 6 sorts for \$1.00. Extra large plants, 40c each.

- ADIANTUM CUNEATUM .- Maiden Hair Fern. very beautiful and graceful fern.
- **ASPIDIUM TAUSSIMENSE.** Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit

BOSTON FERN. - See description above.

#### Aspidistra

Ornamental foliage, plant throwing up shoots which unfold, developing into long, graceful leaves; color a beauting alm. ment as hardy palm. VARIEGATED.— Rich, creamy markings Prices \$1.25 to \$1.50 each. color a beautiful dark glossy green; give same treat-

CYPERUS, UMBRELLA PLANT.--(Alternifolia) A splendid house plant of easy culture; resembles a palm; requires little or no attention, and remains green throughout the year. Keep well watered. Small plants, postpaid, 15c to 25c. Large plants, by express, each, 35c to \$1.00. CRYTOMIUM FALCATUM .--- (The Holly leaved fern). One of the most desirable; with hardy, dark green foliage.

- PTERIS CRETICA ALBO-LINEATA .--A pretty and useful variegated variety, distinctly showing the clear white variegation.
- **OSTRICH PLUME.** See description above.

#### Cycas Revoluta—Sago Palm

These are magnificent plants, of noble and majestic habit, and most impressive; very valuable for both lawn and house decorations; they have a thick trunk, and their heavy, glossy, deep green pinnate leaves resist alike the gas, dust and cold to which decorative plants are frequently exposed; fine plants, large trunks, with well branched leaves at the top. Prices, \$1.00, \$1.50, \$2.50 each.

RHAPIS HUMILIS.-- Rare ornamental Palms with slender, graceful leaves; very handsome and attractive; an excellent decorative variety, re-\$1.50 to \$2.50 each. quiring very little sun.

## **Climbing Vines**

## **CLEMATIS**

Clematis is one of the most beautiful and useful climbers, the several varieties adapting themselves to every requirement. Their magnificent flowers, borne in great profusion in beautiful shades of lavenders, purples, reds, and white, make them especially attractive. Clematis requires a rich loamy soil, but manure should not touch the roots. Cut out the weak and surplus branches in the spring, and the the vine up well to its support. We offer the best of the hardy large flowering varieties.

**RAMONA**—Beautiful lavender, best of its color. **MONTANA**—White, anemone-like flowers, May to July; very hardy, rapid grower.

- **HENRYI**—Fine, large, creamy white flowers; a strong grower and very hardy.
- **JACKMANII**—Intense violet purple, with a rich velvety appearance; distinctly veined. The most popular and finest Clematis we have.
- MAD. ED. ANDRE—A beautiful, new variety; flowers red, large and abundant.

Choice plants of above sorts, each, 60c. Large plants, each, 75c to \$1.00, postpaid.

**CLEMATIS PANICULATA**—A strong, rapid and vigorous grower; it produces sheets of mediumsized, pure white flowers of the most pleasing fragrance; it is perfectly hardy and well adapted for covering trellises or fences. **Choice plants, each, 35c to 40c; large 50c** 

to 60c.

#### Honeysuckle

- BELGIAN—Flowers yellow, blotched with red above; blooms all summer, fragrant. Each, 50c.
- JAPANESE—Evergreen; fragrant flowers, white changing to yellow. Each, 35c.
- HALL'S—Evergreen, very popular; white turning to yellow. Each, 50c.

#### Jasmine

- JASMINE NUDIFLORUM—Branches drooping, enveloped with bright yellow flowers before leaves appear. Each, 50c.
- GARDENIA FLOWERED, CAPE JASMINE— Free-blooming, pure white flowers, star shaped; foliage delicate; evergreen. - Each, 50c.

#### Ampelopsis

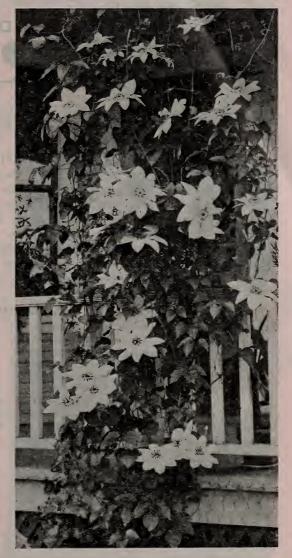
- VEITCHEII "Boston Ivy"—Leaves glossy green, coloring bronze in fall; flowers small; berries deep blue. Each, 35c.
- QUINQUEFOLIA "Virginia Creeper"—Common American Ivy. Each, 35c.

#### **Trumpet Vine**

- BIGNONIA GRANDIFLORA (Trumpet Vine) Strong climber; deciduous; flowers orangescarlet. Each, 50c.
- BIGNONIA TWEEDIANA Evergreen, clinging; flowers canary yellow. Each, 50c.

#### **Dutchman's Pipe**

ARISTOLOCHIA SIPHO — A handsome bright green luxuriant vine, having large foliage and brownish, pipe-shaped flowers. A strong, rapid grower, valuable for trellis, porch or arbor. Strong Plants. Each, 50c.



#### **English Ivy**

Large, thick, shining, leathery leaves. Each, 25c.

#### Wistaria

W. Sinensis—Chinese Wistaria— One of the most elegant and rapid growing of all climbing plants; grows 15 to 20 feet in a season; has long pendulous clusters of pale blue flowers in May and June and in autumn.

- Choice plants, each, 35c to 50c; large, 75c to \$1.50.
- W. MULTIJUGA—Similar to above, but flowers are darker. Each, 75c to \$1.50.
- W. BRACHYBOTRYS—White flowering. Each, 75c to \$1.50.

HARDY SPRING FLOWERING shrubs are inexpensive, require little care and will permanently add to the beauty and value of your home. For select list of Ornamental and Flowering Shrubs, Hollies, Evergreen, Fruit and Shade Trees see our 68-page Autumn Catalog. FREE on request. PORTLAND SEED COMPANY'S



DIAMOND QUALITY ROSES are large, sturdy, two-year-old, field-grown roses that will give you splendid flowers the first season. They are true to name and our list includes the best of the well known popular varieties, the most meritorious of recent novelties and the Gold Medal roses of the famous European growers.

YOUR ROSE ORDER entrusted to us will insure careful selection and no substitution If you do not find what you want in this catalog write us. Our excellent connections with the great centers of production enable us to supply any variety in commerce.

#### Abbreviations

**T.—TEA**—One of the best classes of roses, and truly ever blooming. They are hardy in this section, frequently wintering without any protection, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

- **H. P. HYBRID PERPETUAL**—The hardiest of all roses, vigorous in growth and easy of culture, producing large flowers, fine in form and fragrance.
- **H. T.—HYBRID TEA**—Most of these are as free flowering and as constant bloomers as the teas, and are hardier, but, as a rule, not so hardy as the H. P.'s.

#### PLANTING AND CARE

In our favored section, Roses attain a perfection seldom equalled, but you can not expect them to thrive and bloom unless you care for them. We offer the following simple suggestions.

- **SOIL**—Any good, well-drained garden soil enriched with fertilizer will give excellent results. If heavy clay soil mulch well with burnt earth and manure, rotted sod of leaf mold.
- rotted sod of leaf mold. WATERING—When setting out, water regularly until roots are well set; then about once a week unless the ground is very dry; in such cases more often. Do not get the foliage wet after a hot day. This causes mildew.
- **FERTILIZER**—Our odorless commercial fertilizer. Bone Meal, Tankage of Blood, will give excellent results, and should always be applied after the plants start their growth.
- **FINALLY**—Keep the surface well worked around the roots. This is as necessary as water or fertilizer.

When planting cut back freely, and the bush will recover quickly.

**SHIPPING.**— We always send all our two-year-old rose bushes charges collect by express or freight, packing them so they will carry safely even though they should be on the road for two weeks or more. If necessary, we can send small two-year-old bushes by mail at an additional cost of 7c each to cover postage, but in such cases we always prune the tops and roots ready for planting.

PRICES.— 35c roses, \$3.00 doz.; 40c roses, \$4.00 doz.; 50c roses, \$5.00 doz.; 60c roses, \$6.00 doz.; 75c roses, \$8.00 doz.; \$1.00 roses, \$10.00 doz.

FOR ALPHABETICAL, CLASSIFIED LIST OF ROSES, SEE PAGE 106.

## Beautiful Roses of Recent Introduction

Magnificent new roses imported direct from famous Irish and Continental growers. Two-Year Old Field Grown Plants Only

**BRITISH QUEEN.**—(H. T.) Pure white large, full flowers of exquisite form, opening freely in all weathers; promises to be one of the best white roses for bedding and cutting. Surpassing "Druschki" in beauty of form and purity.

#### Each, \$1.25.

- GEORGE DICKSON.—(H. T.) Very strong and vigorous, upright growth, flowers of the largest size; perfect in shape and unique in color, being a velvety blackish crimson with the back of the petals heavily veined with pure crimson maroon. Delightfully scented. **Each, \$2.00**.
- LADY MARY WARD.—(H. T.) Free, vigorous and hardy, color -rich orange, shaded deeper orange with metallic veneering; very brilliant splendid for bedding and cutting. Each, \$3.00.
- LYON.—(Pernetiana.) The Lyon is a beautiful shrimp pink with salmon and chrome yellow shadings. Large, coralred buds, beautifully formed; full, globular flowers of rare beauty; a continuous and free bloomer. Lyon is the "perfect rose," only one scoring 100 points. Gold medal and special certificate awards. **Each**, **50c**.
- JULIET.—(H. B.) A magnificent new rose, the color being a wonderful combination of old gold on the outside of petals and a rich, rosy red on the inside. Flowers are large, full and delightfully scented. The foliage is luxuriant and beautiful. Juliet is a vigorous and abundant grower and the most pleasing and distinctive novelty ever offered. We have an extra choice, though limited stock of large, field grown two-year-old plants. Each, \$1.00.



#### **Beautiful Roses of Recent Introduction-Cont.**

- **OLD GOLD.**—(H. T.) A splendid garden rose of vivid reddish orange color with coppery red and coppery apricot shadings. Flowers are medium size and moderately full. Fine for bedding.
- Each. \$3.00. QUEEN MARY.—(H. T.) Vigorous, free branching growth, a bedding and garden rose of great beauty and refinement, flowers medium size and fine form, color lemon chrome, bordered at the edge with pure, deep carmine; a charming combination affording a most delightful contrast. Each, \$3.00.
- RAYON D'OR.—(Pern.) Flowers are large, full, open freely, keep well and are borne in greatest profusion. Buds long, pointed, of deep orange cadmium smeared claret, opening to a rich sunflower yellow, which does not fade. Foliage is deep, glossy green; strong growing, free branching and absolutely free from the attack of mildew. This splendid new rose, a cross between Melaine Soupert and Soliel D'Or, is producing a greater sensation than was caused by Lyon, both these wonderful varieties originating from the same source. Each, \$1.00.

#### Five Rare New Irish Roses

Price: Young plants, 25c each; set of 5 sorts, \$1.00. Two-year-old plants, \$1.00 each.

- **COUNTESS OF SHAFTESBURY.**—(H. T.) A splendid new pink of the most ideal type of Hybrid Tea; flowers are large, perfect in form and produced in the greatest profusion. The color is a bright, silvery carmine mottled and flushed shell pink, giving a picotee effect; a fine exhibition rose, being a Gold Medal winner and the best pink rose for massing or garden. **Each, \$1.00**.
- EDWARD MAWLEY.—(H. T.) Flowers large and full, of finest form, with beautiful, long pointed buds; color deep, rich, velvety crimson which does not fade; flowers keep well when cut; growth is vigorous, upright and branching, with handsome foliage. Edward Mawley is one of the finest red roses ever offered, being a decided advancement in its class. Two-year-old, field-grownplants. Each, \$1.00-
- MRS. CHAS. E. ALLAN.—(H. T.) A delightful garden rose of a delicate and novel coloring, opening a pale orange and changing to ochre as the flower opens. Buds are long, pointed, and flowers are full on good stems, flowers freely every shoot producing a bloom. A vigorous grower and one of the finest garden roses ever introduced. Each, \$1.00.
- LADY ALICE STANLEY.—(H. T.) This grand new gold medal rose is large, very full and of splendid substance; petals shell shaped, pointed, giving perfect form to the flowers, which are a lovely, deep coral, inside pale flesh; deliciously fragrant and are very lasting. A free grower and a profuse and constant bloomer. Two-yearold plants. Each, 75c.
- MRS. FOLEY HOBBS.— A veritable giant among Tea Roses. Color, delicate ivory white, delicately tinged pink on edge of petals; deliciously scented; a great bedding rose. Each, 75c



#### Sunburst Quartette New Yellow Roses. Four of the Most Popular New Yellow Roses. All are Fine Garden Roses.

Price: Young plants, 25c each; set of 4 sorts, 80c each. Two-year-old plants, 75c each.

- LADY HILLINGDON.—(T.) Deep apricot yellow, long and pointed bud, a fine forcing or garden rose, excellent for cutting. Flowers are of a good substance, very lasting and foliage handsome and luxuriant. Lady Hillingdon is considered the best decorative rose in its class. This aristocratic beauty is a seedling from Papa Gontier and Madame Hoste. Two year old plants. Each, 75c.
- ame Hoste. Two year old plants. Each, 75c. SUNBURST.—(H. T.) The finest of all yellow roses with long pointed buds carried singly on good stems. Flowers large, full and of most beautiful form, color a superb Cadmium yellow with orange yellow center. The foliage is a handsome bronze green; a vigorous grower and good both as a forcing garden rose. Each, 75c.
- MRS. AARON WARD.—(T.) One of the most delightful roses of recent years in a color that catches the eye at once — a deep golden orange color shading out to lemon or creamy yellow at the edge of the petals. Some describe the rose as an Indian yellow. The buds are cupped and very deep, showing the glowing heart to the best advantage. Flowers very large, very full, of exquisitely refined form. One of the most beautiful roses in existence. **Each, 60c.**
- REINE MERE D'ITALIA.— Apricot ochre yellow, medium sized, full flowers, very freely produced. Dainty and beautiful. Each, 60c.

## **8** Grand New Garden Roses

These splendid free blooming Roses are newer varieties that are becoming more plentiful and can be offered at a very low price. In this list you will find many famous prize winners and some of the most beautiful and popular roses. Price of young plants, 20 cents each: set of 8



- Price of young plants, 20 cents each; set of 8 sorts, \$1.50; 2-year old plants, 50c each, unless otherwise marked.
- **DOROTHY PAGE ROBERTS.**—(H. T.) Coppery pink, suffused with apricot yellow, very free and perpetual, a delightful garden rose. **DUCHESS OF PORTLAND.**—(H. T.) One of the
- **DUCHESS OF PORTLAND.**—(H. T.) One of the best Dickson introductions; a lovely pale yellow with thick, leathery petals, full and perfect form; hardy, robust rose, blooming earlier and more freely than "Kaiserin," long stems; lovely in bud or flower, and a good keeper. Gold medal N. R. S.
- JONKEER J. L. MOCK.—(H. T.) A magnificent and unique rose. Inside of petals, red, outside silvery blush white. Of fine form, good substance and largest size. A strong, rapid grower. Awarded eight prizes at the recent European
- shows. JOSEPH HILL.—(H. T.) Salmon pink shaded yel-
- low. Outside petals yellow suffused copper, a large, free blooming rose of elegant form. **60c** LE PROGRESS.—(H. T.) Nankeen yellow, open-
- **LE PROGRESS.**—(H. T.) Nankeen yellow, opening to saffron yellow; large, full and cupped, opening freely: a grand rose, always in flower.
- ing freely: a grand rose, always in flower. **MADAME MELANIE SOUPERT.**—(H. T.) Splendid new orange yellow shaded pink; beautiful long-pointed buds, large size, free blooming; a strong, upright grower; best of its color.
- astrong, upright grower; best of its color.
   MRS. ARTHUR WADDELL.—(H. T.) A strong, grower, foliage highly ornamental. Large, long pointed buds of a bright, rosy scarlet, a finely formed flower of a rich apricot or salmon color.
- **PHARISAER.**—(H. T.) Rose, shaded salmon, blooms freely; opens well, is large and of finest form. A free and constant bloomer.

#### **Rare Roses of Recent Introduction**

Price: Young plants, 15c each; 4 for 50 cents; 2-year old plants, 40 cents each; 6 for \$2.00.

- AVOCA.—(H. T.) Deep scarlet crimson flowers of perfect form; very fragrant; a fine exhibition or garden rose; vigorous, free bloomer. BETTY.—(H. T.) Beautiful coppery rose color,
- **BETTY.**—(H. T.) Beautiful coppery rose color, overspread with golden yellow. Deliciously fragrant; very large, fairly full and of glorious form. Superb decorative variety for the garden; fairly glows with brilliancy.
- COUNTESS OF GOSFORD.--(H. T.) Clear salmon pink, base of petals shading to saffron yellow, very vigorous; perpetual bloomer.
- very vigorous; perpetual bloomer. **FRAU KARL DRUSCHKI.**—(H. P.) The white American Beauty. Makes splendid buds and immense flowers; perfectly double and delightfully fragrant; large, thick petals; bright, shining green leaves, elegantly veined; a healthy, vigorous grower, and a constant and abundant bloomer. **FLORENCE PEMBERTON.**—(H. T.) Creamy
- FLORENCE PEMBERTON.—(H. T.) Creamy white, suffused pink. Flowers very large and full, of perfect form and wonderful substance. FRANZ DEEGAN.—(H. T.) This beautiful yel-
- FRANZ DEEGAN.—(H. T.) This beautiful yellow Hybrid Tea is a fine grower, having dark, leathery foliage and the good habit of throwing up numerous heavy canes, each one crowned by a glorious flower of large size.
- **GENERAL MCARTHUR.** (H. T.) Dazzling crimson scarlet; a grand American rose of ideal form, delicious perfume and magnificent foliage. Blooms continuously in great profusion; the grandest red rose for garden or cutting. **HUGH DICKSON.**—(H. P.) Glowing, crimson-
- HUGH DICKSON.—(H. P.) Glowing, crimsonshaded scarlet; large, full, perfectly formed, delightful perfume, strong grower, perpetual bloomer (should be cut back freely). After careful comparative tests, we believe Hugh Dickson is the best hardy red garden rose to date.
- best hardy red garden rose to date. J. B. CLARK.--(H. T.) One of the finest of new roses. Its glorious flowers are intense scarlet, shaded blackish crimson, of giant size, finely formed and fragrant; growth vigorous and upright.

- KILLARNEY.—(H. T.) The new Irish Beauty. Color an exquisite shade of deep shell-pink lightened with silvery pink. Buds are exceptionally long and beautifully formed.
   LADY ASHTOWN.—(H. T.) One of the finest pinks of a side device.
- LADY ASHTOWN.—(H. T.) One of the finest pinks of a rich, deep, silvery tone; flowers large, perfect form; free blooming; vigorous.
   MRS. DAVID JARDINE.—(H. T.) Delightful
- **MRS. DAVID JARDINE.**—(H. T.) Delightful shade of bright, rosy pink, shading in outer petals to salmon pink; large, perfect form; very highly perfumed; a grand rose.
- MADAME PHILLIPPE RIVOIRE.—(H. T.) Beautiful apricot yellow and Nankeen yellow center, reverse of petals carmine; large, full and globular; a splendid, free blooming rose.
- a splendid, free blooming rose.
   MAD. SEGOND WEBBER.—(H. T.) Pure, rosy salmon, vivid center, large, full and perfectly formed flower, flowering freely and continuously on stiff erect stems.
   MY MARYLAND.—(H. T.) Beautiful, bright
- MY MARYLAND.—(H. T.) Beautiful, bright pink, with paler edges; delightfully fragrant; robust grower and very free flowering; flowers full and good keeper. The best pink of its color; especially fine for florists, as well as being one of the grandest garden roses. **PRINCE DE BULGAIRE.**—(H. T.) Very vigorous
- **PRINCE DE BULGAIRE.**—(H. T.) Very vigorous grower, with large, bright green foliage; beautiful form of bud, flower very large and full. The outer petals are extremely large, of superb rosy flesh color; center of flower bright red, very fine and free.
- white and heavy wax-like texture, remaining a long time in bud. Flowers are full and beautiful when open and are very lasting.
- when open and are very lasting. **W. R. SMITH.**—(T.) (Maidenblush.)—A superb new rose of American origin, producing elegantly shaped buds and open flowers of much beauty. Of exquisite silvery pink color and sweetly perfumed.



Color, beau-

Very

#### **Two New Single Irish Roses**

- IRISH ELEGANCE .-- (S.) Large, single, golden bronze flowers of great beauty, free and constant bloomer, with deep bronze foliage; a fine buttonhole rose. These single roses make a charming garden display, blooming profusely, and are also splendid for exhibition. Each, 50c.
- **IRISH SIMPLICITY.**—(S.) Almost single, pure white and of immense size. The great size and substance of the petals which are slightly cupped and the golden yellow anthers may readily bring to mind the comparison to a huge water lily. Vigorous grower with handsome deep green Each, 50c. foliage.

long, oval buds, sharply pointed; very striking in

form. The color is a bright, cherry crimson. MAD. ABEL CHATENAY.—(H. T.) Color, b

tiful rosy carmine, with darker shadings.

richly colored. One of our finest varieties.

MAMAN COCHET.--(T.) This is one of the most

RICHMOND.-(H. T.) The most vivid of ever-

blooming red roses, buds and flowers of the most perfect and desirable form. The best of its color. **SOUV. DE PIERRE NOTTING.**—(T.) Very large, perfectly full, of elegant form; has a beautiful long bud; color, orange yellow, bordered in car-

mine rose. SOUV. DE PRESIDENT CARNOT.--(H. T.)

Lovely shell-pink, delicately tinted with golden fawn on rich creamy white. Superb for bedding in open ground. Makes splendid buds for Sum-

WHITE MAMAN COCHET.-(T.) White, grand

substance, immense size, exquisitely fragrant and a free bloomer; buds long and pointed.

beautiful Tea roses we list. The color is a deep

rosy pink, the inner side of the petals silvery rose.

#### Columbia Collection Choice Roses

- One-year-old plants, 15c; set of 12 sorts, \$1.25. Two-year-old plants, 35c; set of 12 sorts, \$3.00 LADY BATTERSEA.-(H. T.) This variety has
- AMERICAN BEAUTY.--(H. P.) One of the larg-est, sweetest and best. Color, rich, rosy crimson, shaded and veined in the most charming manner.
- BELLE SIEBRECHT.--(H. T.) A true, solid pink of the richest shade, a rare color. The flowers are sweetly perfumed, and large, beautifully formed, of long, tapering shape, with high center, and when half blown the petals reflex in a graceful manner.
- DEAN HOLE.-(H. T.) Beautiful silvery carmine, shaded bright golden pink; grand flowers of great substance, perfect in form; vigorous, free branching habit; continuous bloomer; one of the best exhibition roses. Gold medal. N. R. S. **KAISERIN AUG. VICTORIA.**—(H. T.) A beau-
- tiful rose with elegant, large pointed buds and very large, full double flowers; color delicate creamy white; deliciously fragrant. A strong, healthy grower and constant bloomer. MADAME CAROLINE TESTOUT.—(H. T.) A
- grand rose of the La France type, but with flowers larger and finer. Color, bright satiny pink; very fragrant and free in bloom. The official "Carnival Rose.

## **Favorite Collection of Beautiful Roses**

One-year-old plants, 10c; set of 14 sorts, \$1.25. Two-year-old bushes, 35c; set of 12 sorts, \$3.00

mer cutting

- CECILE BRUNNER .--- (Poly.) Bright, rose, yellowish in center; very sweet; dwarf polyanthus.
- **CLARA WATSON.**—(H. T.) A bright salmon rose tinted peach, good form; a vigorous grower.
- ETOILE DE LYON.-(T.) Blooms freely, and every flower is a gem, equaling the Marechal Neil in size. Sweet scented; color, rich golden yellow.
- GRUS AN TEPLITZ or VIRGINIA R. COXE.-(H. T.) Color, fiery crimson, with a dark velvety sheen, very fragrant. The freest blooming rose.
- LA FRANCE.--(H. T.) Both flowers and buds are of grand size; color, a silvery rose, changing to pink. A general favorite. Sweetest of all roses.
- MARIE VAN HOUTTE.—(T.) Of a fine faultless straw-yellow color: outer petals washed and outlined with a bright rosy carmine.

**PAPA GONTIER.**—(T.) Large and semi-double; a vivid cherry red color, shaded yellow, reverse

- of petals crimson. PERLE DES JARDINS.-(T.) A clear, golden yel-
- low, an indescribably rich and beautiful shade. **RAINBOW.**—(H. T.) Buds and flowers of large size; color, a beautiful shade of deep pink, dis-
- tinctly striped and mottled with brilliant crimson, elegantly shaded and toned with rich amber. SAFRANO.--(T.) Bright apricot yellow, tinged
- orange and fawn. **VISCOUNTESS FOLKSTONE.-**- Flowers borne on strong stems, with thick foliage; color, deli-cately tinted flesh, almost white, with beautiful satin finish.
- WHITE LA FRANCE.-(H. T.) This magnificent rose is a pure white La France, having just a breath of rose-tinted blush.

## **12 Fine Hybrid Perpetual Roses**

Price, 15c each; set of 12 sorts, \$1.25, postpaid; 2-year-old plants, 35c each; set of 12 sorts. \$3.00

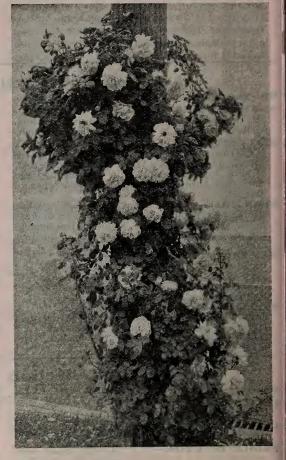
- ANNA DE DIESBACH.--(H. P.) Beautiful, clear, carmine pink; very large, full and delightfully fragrant
- BARON DE BONSTETTIN-(H.P.) Splendid, large flowers, very double and full; color, rich, dark red, passing to deep velvety maroon.
- CLIO.- Vigorous growth; large, handsome foliage; flowers flesh color, shaded in the center with rosy pink.
- CONRAD F. MEYER .--- (Rug.) Beautiful silvery pink, of grand form and delicious fragrance, hardy John of the second straight of t
- Lovely deep rose pink, outer petals shaded pale flesh, base white, a new and unique shade. Large perfect flowers, free blooming; a grand Autumn rose.

- GLOIRE LYONNAISE .--- (H. P.) Color, chamois yellow, deepest at the center, passing to creamy white; large, full, sweet and very distinct. MARGARET DICKSON.—(H. P.) Magnificent
- form; white, with pale flesh center; petals very large, shell-shaped, and of great substance; fragrant.
- MRS. JOHN LAING .--- (H. P.) Very free flowering; color, a soft, delicate pink, with satiny tinge.
- PAUL NEYRON.—(H. P.) Deep, shining rose, double and handsomely formed; blooms freely, the largest variety in existence.
  PRINCE CAMILLE DE ROHAN.—(H. P.) Very
- dark, rich velvety crimson, passing to intense maroon, shaded black; regarded as the best of its color.
- ULRICH BRUNNER.—(H. P.) A magnificent rose, extra large, bold flowers, full and globular; petals large and of good substance; color, rich, glowing crimson, elegantly flamed with scarlet.

#### CLIMBING AND PILLAR ROSES

Price, 15c each; any four sorts, 50c. Two-year-old bushes, 35c each (except as noted).

- AARD'S PILLAR.— Rich velvety crimson; fine large, full flower, cupped form; a fine hardy, freeblooming, free-growing garden rose. AMERICAN PILLAR — WICH.— A
- beautiful bright pink with yellow anthers. The splendid large single flowers are borne in great clusters. Price, 2-year, 50c.
- CLIMBING BELLE SIEBRECHT.--(C. H. T.)-Flowers identical with bush type; vigorous climber; hardy. CLIMBING KAISERIN (Mrs. Robert Peary)—
- Flowers fine, ivory white, of heavy texture, and large size.
- CLIMBING LA FRANCE .-- Identical with the well-known La France; vigorous climber. CLIMBING LADY ASHTOWN.— Strong, vigor-
- ous climbing sport of this well-known valuable rose. Price, 50c.
- **CLIMBING MADAME CAROLINE TESTOUT** Covered during the whole season with immense globular flowers of the same beautiful shade of
- pink as seen in the bush sort. CLIMBING METEOR.— Rapid grower; rich, dark velvety crimson flowers.
- CLIMBING PAPA GONTIER.—(T.) A "Nativ Sport" from the favorite bush "Papa Gontier. CLIMBING WHITE MAMAN COCHET.--(T.) A "Native
- The introducer describes this as identical with the bush type; vigorous free bloomer Price, 50c.
- DR. VAN FLEET.— A new Hybrid Climber of great beauty, bearing freely. Large, fully double blooms of a dainty flesh pink with rosy center flowers of perfect form with reflex petals and are carried on long stems, making this a desirable variety A cross of Pres. Oarnot and Wichuriana.
- Price, 2-year, 50c. DUCHESS D'AUERSTADT. A splendid climber of the Marechal Neil type, being a more vigorous and hardy rose. Color is a fine rich yellow, flowers are large, full and open freely. **GAINSBOROUGH.**— Graceful flower of dainty
- shell pink color and satiny finish. Hardy, everblooming and a free climber.
- GLOIRE DE DIJON .- An old favorite, noted for its free flowering, its delicate tea scent, and its shades of color, being a blending of amber, carmine and cream.
- MADAME ALFRED CARRIERE.- Extra large, full flowers, very double and sweet, and a most profuse and persistent bloomer; color, rich,
- creamy white, faintly tinged pale yellow and blush. MARECHAL NEIL.— A magnificent deep golden yellow variety; so famous as to need no description; grown the world over for its immense yellow flowers; the finest rose of its color in existence. **PILLAR OF GOLD.**— Rich golden yellow suffused
- copper and pink. Flowers are full, of fine form and delightfully fragrant. They are borne freely in clusters of from 5 to 10.



- PINK CHEROKEE .- A grand new climbing rose, of rare beauty and undoubted merit and entirely distinct from any other climbing rose. The lovely single blossoms are 3 to 5 inches in diameter, saucer shaped and of a beautiful shade of Price, 2-year, each 50c light pink.
- SILVER MOON .- A magnificent white climber, cross of Wichuriana and Cherokee, large, semidouble blooms of good substance with golden stamens. Flowers are carried on long stems, Foliage is abundant, delightfully fragrant, of a bronze green color and is immune to mildew. Price, 2-year, each, 50c.

#### **Pillar Collection-Climbing Roses** Price: Postpaid, 10c each; set of 6 sorts, 50c. Two-year-old plants, 35c each.

BEAUTY OF GLAZENWOOD .- Bronzed yellow

- or copper and fawn color. One of our grandest climbing roses. Very hardy and a free bloomer. CLIMBING CECIL BRUNNER.— Strong ram-
- pant climber, ever-blooming clusters of pretty pink flowers, especially beautiful in bud. A gem among climbing roses. LA MARQUE.— Flowers of good size, borne in
- large clusters; color, pure white.
- REINE MARIE HENRIETTE .- A strong, vigorous grower; flowers large, full, and of fine form;
- color, glowing crimson, elegantly shaded. **REVE D'OR** (Climbing Safrano).— Color apri-cot yellow, with orange and fawn tints; petals of superb and delicate texture.
- WILLIAM A. RICHARDSON .- Color, rich coppery yellow, flushed with carmine; a very beautiful variety, having few equals.

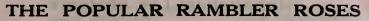
#### Moss Roses

These old-fashioned Roses are coming into favor and we offer the following as best of their colors. Price, each, 35c; dozen, \$3.00.

- BLANCHE MOREAU. Flowers pure white, large, CRESTED MOSS .- Bright rose, light edging, well
- sweetly perfumed; Best white Moss Rose. CHAPEAU DE NAPOLEON.— Splendid rich red, best of its color.

mossed. SALET.— Color, lovely satin rose; very full and

of great beauty; one of the best.



The Rambler Roses are strong, vigorous climbers, growing ten to twelve feet high in one season. They bear immense clusters of beautiful, fragrant flowers.

- One-year-old, 15c each; 4 sorts, 50c. Price: Two-year-old plants, 35c each.
- DOROTHY PERKINS .- Polyanthus type; color a beautiful bright shell pink; flowers large, very double; petals prettily crinkled; blooms in large clusters of 30 to 40; a splendid keeper.
- FLOWER OF FAIRFIELD.— Everblooming crimson rambler, brilliant crimson, base of petals white, flowering in great profusion perpetually throughout the season. Flower of Fairfield is a true, everblooming, Crimson Rambler, a splendid grower and a great improvement over the old type; strong field-grown plants.
- PHILADELPHIA RAMBLER.- An improved type of the favorite Crimson Rambler; color, deeper, more brilliant and lasting; flowers perfectly double, borne in great profusion, much earlier than the old type; vigorous, luxuriant foliage, not so susceptible to mildew.
- TAUSANDSCHAUN.--- A lovely shade of soft pink, free blooming; a vigorous climber with splendid foliage.
- VEILCHENBLAU (Blue Rambler) .--- This is the Blue Rambler which created such a furore in Europe. It is a seedling from Crimson Rambler with semi-double flowers produced in very large trusses. The flowers first open pink, but quickly change to a violet, or steel blue. Totally dis-tinct and a wonderful Rose for pillar and porch decoration.
- WHITE RAMBLER .--- Flowers pure white, sometimes faintly tinged blush; flowers borne in immense clusters; very vigorous.





Dorothy Perkins

- WHITE DOROTHY .- As its name indicates, it is a sport from Dorothy Perkins, possessing all the fine qualities of that grand variety, but having pure, snow white flowers. This rose, we believe. will become a fixture in the list of climbing roses.
- YELLOW RAMBLER .- Same type and growth as Crimson Rambler, except for color, which is a pure, bright yellow.

DWARF BABY RAMBLER-(Dwarf Bush Type A dwarf Crimson Rambler not over 18 inches high, producing large trusses of light crimson flowers; clean dark green foliage; it will flower the year around.

## Standard, or Tree Roses

- Price of all Tree or Standard Roses, \$1.00 to \$2.00 each, according to size of head. Tree roses are budded, or grafted on hardy rose stocks about four feet high. They soon make good sized heads, forming a small tree; especially desirable for planting as single specimens, in backgrounds or rows along walks or driveways.
- Order any color or variety you wish and we will send it or give you as good a substitute as possible. We aim to have the following varieties in stock:

Mrs. Jno. Laing Prince de Bulgarie Lyon La France K. A. Victoria Mad. Caroline Testout **Ulrich Brunner** Grus an Teplitz F. K. Druschki **Baby Rambler** 

Richmond **Baroness Rothschild** Hugh Dickson **Countess of Gosford Dorothy Perkins** Glorie de Dijon Gen. McArthur **Marechal** Neil Mad. Abel Chatenay

75c

PRICES: Qts., 25c.; Gal. READY FOR USE

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### PORTLAND SEED COMPANY'S

## **Alphabetical List of Roses**

**Flower Pots** 

We carry a large and complete line of standard red clay Flower, Fern, Azalea Pots, Bulb Pans and Hanging Baskets and can make prompt deliveries at right prices.

Florists, nurserymen and growers should send list of requirements for Special Prices. FLOWER, FERN, AZALEA POTS OR BULB PANS ALL SAME PRICE.

				Saucers
Size		Each	Dozen	Each
2 inch		\$0.02	\$0.20	
3 inch			.30	
4 inch			.40	\$9.03
5 inch			.70	.04
6 inch			.90	.05
7 inch			1.20	.07 1/2
8 inch			1.75	.10
9 inch			2.50	.15
10 inch				.20
12 inch				.35
14 inch				1.00
16 inch			• • •	1.00
	FLOWED			
	FLOWER			
	price, Mois			reakabie
Light, Co	nvenient.		100	1000
2 <sup>1</sup> / <sub>2</sub> inch			\$ .60	\$5.50
3 inch				
4 inch				11.00



Foster Rose Tubes

FOR ROSARIANS AND CUT FLOWER EXHIBITORS FOR SHOWING ROSES

The Foster Exhibition tubes with adjustable clips, enable you to transfer flowers from one position to another without disturbing their arrangement. A wire holds the flower firmly in any desired position. Tubes afford an ample supply of water close to the rose. Used at all English shows. **Price, each**, **35c; doz., \$4.00**.

HANGING BASKETS. These are well made and are better than wire baskets, as plants do not dry out so quickly. 8-inch, each, 30c; doz., \$3.00. 10-inch, each, 40c; doz., \$4.25; 12-inch, each, 60c; doz., \$6.50.

**NOTE.**— At above prices we will pack the pots carefully, but buyer must pay freight or express charges. We buy in carload lots and the wholesale trade, florists and nurserymen are requested to send for special prices, stating number wanted.

106



Crab Apples						
10		Ea	ch F	Per 10		
25	2 year trees		\$0.35	\$3.00		
25	Plu					
			~ ~			
75	2 years			2.25		
25	1 year, 4 to 6 feet			1.75		
20	Select, 2 to 3 years		35			
	Pru	ines				
00	2 years		25	2.25		
75	1 year, 4 to 6 feet			1.75		
	Select, 2 to 3 years					
	Raspberrie	P. Par	1			
	Raspberrie	s-rec	Per	Per		
1 .		Each	10	100		
Post F	Red Sorts, 2 year					
00301	reu 50105, 2 year	. 00.00	φ <b>0.1</b> 0	\$ <del>4</del> .00		
	Raspberries-	-Black	Cap			
			Per	Per		
		$\operatorname{Each}$	10	100		
	e well-rooted plants		\$0.90	\$6.00		
Lov	v prices by the thousar	ıd.				
	Goosebe	rries				
	Googenee		Per	Per		
		Each	10	100		
vea	rs		\$1.00			
	r		.80	5.00		
	Blackbe	rries		-		
		-	Per	Per		
		Each	10	100		
	ard sorts		-	\$ 5.00		
rego	n Evergreen	15	1.25	10.00		

## **Specialties in Berries for Market or Garden**

"Conrath."-Best Early Black Cap

A black raspberry of superior quality, being ten days earlier than the Gregg, coming in with the earliest reds. We especially recommend the Conrath as a good "blackcap" for Oregon. Try it. **Choice, weil rooted plants, each, 15c; 10, \$1.25,** 

postpaid. Freight or express, 10, \$1.00; 100, \$8.00.

#### **Burbank's Phenomenal**

Compared with the Logan the color and general form are much the same the first season, particularly if the growing conditions have not been favorable, but when once established they have no equal in

size, quality or productiveness. Prices: Two-year-oid, 25c each; \$2.50 per doz., postpaid; by express or freight, \$1.75 per doz., \$12.50 per 100.

#### Logan Berry

(Raspberry-Biackberry). An exceedingly strong grower. The fruit is longer than the blackberry; color, dark red and produced in immense clusters. Has the flavor of both the blackberry and the raspberry. Fruit ripens early, the bulk being gone before the blackberries or raspberries become plentiful. Prices: Two-year-oid, 20c each, \$2.00 per

doz., postpaid; by express or freight, \$1.65 per doz; \$10.00 per 100.

One-year-old (tips), 15c each; per 12, \$1.50, postpaid; by express or freight, \$1.00 per 10; \$8.00 per 100. Low prices by the thousand.

**Dewberry, Lucretia** A trailing variety of the blackberry, ripening between the raspberry and the blackberry. Fruit large, handsome, sweet and luscious. Price: Each, 20c; per 10, \$1.50, postpaid. By express or freight, \$1.25 per 10; \$10.00 per

100.

#### Blackberry, Eldorado

A valuable new variety; fruit large, jet black, melting, sweet and rich; hardy and very productive; fine for Oregon. Postpaid, each, 15c; 10, \$1.25. By exp. or frt each, 10c; 10, 90c; 100, \$7,00.

#### Himalaya Giant

An exceedingly strong, rampant grower of a trailing nature. A heavy cropper. The berries are large, juicy, coreless, sweet and firm, with a de-licious aromatic flavor. Its deep rooting qualities enable it to produce a large, firm berry even in a very dry season.

Each, 20c; dozen, \$2.00, postpaid. Freight or express, each, 15c; doz., \$1.50; 100, \$10.00.

#### **New Mammoth**

This wonderful blackberry is a vigorous grower of trailing habit; the foliage is large, thick, of a deep green color. It is enormously productive and exceedingly early, ripening three weeks before other cultivated kinds. Seeds small, soft and abundant; cores small and soft. In size and flavor it surpasses all other varieties of blackberries.

Prices: Two years old, each, 25c; 10, postpaid, \$2.00; 12, by express or freight, 10 \$1.75; 100, \$12.50.

#### The Improved Superlative Raspberry

The color is a velvety red crimson. The berry large and firm, with very small, brittle seeds. Its immense size, uniformity and luscious flavor make "Superlative" peerless among raspberries, is firm, disease-resisting and nearly a week earlier than the Cuthbert in ripening. **Price: Each, 20c; doz., \$2.00, postpaid;** freight or express, doz., \$1.65; 100, \$12.50.

SEED.





Strains of New Oregon, Gold Dollar, Marshall, Magoon, Clark's Seedling and other Western varieties, many of which were introduced by ourselves, still hold their position as the leading commercial varieties of the Northwest, and are being planted more extensively each season. Thus demonstrating by actual market and growing tests the great superiority of our Western varieties, against the keenest competition from all sections.

"Diamond Quality" Strawberry Plants are large, vigorous and healthy. They are heavily rooted and have large, full crowns; have been carefully grown, and are free from disease and pests. We dig as ordered and pack for shipment in ventilated crates of 500 plants each, crowns up. They are grown from our select strains and are always true to name; no substitution is ever allowed without the full knowledge of the purchaser.

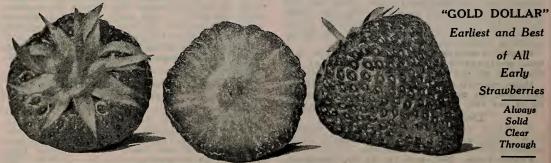
Better Strawberries or larger crops are not produced anywhere than right here in the Northwest, and the handsomest — firmest — best colored — richest flavored strawberries are our Western varieties.

## THEY ARE BEST for WESTERN GROWERS

#### **Care For and Feed Your Plants**

Neglect is the prime factor in strawberry failures, and most strawberry beds suffer from lack of attention and starvation. Proper fertilization and intelligent culture insure enormous crops of finest fruit and freedom from diseases and pests. White grubs, cutworms, crown miners, etc., can all be controlled by preventive measures. Never set strawberries in or near clover sod or hay fields. Such ground should have at least two years cultivation before using

for strawberries. Remove the mulch directly after fruiting. This helps to control many evils. For helpful details of care and culture, see our **Strawberry Booklet**, **32** pages, sent free on request.



## STRAWBERRY PLANTS—Continued NEW OREGON—Our Own Introduction Best, Most Uniform, and Heaviest Yielding Main Crop Strawberry

"NEW OREGON" is large, firm and of fine form, averaging 15 to the quart box, color a brilliant, deep, rich red, having a glossy varnished appearance when fully ripe. This dark blood red coloring extends through to the very center, and, no matter how large, the "NEW OREGON" is never hollow. When fully ripe "NEW OREGON" has a distinctive flavor suggestive of the wild berry, is crisp and delicious, and will remain on the vine for three days without injury, keeping perfectly for many days after picking; stands handling and long shipments and will hold its color, shape and flavor when canned.

handling and long shipments and will hold its color, shape and flavor when canned. "NEW OREGON" is an early and continuous bearer, being ready for marketing the first half of May in the Willamette Valley and holds up in size and quality throughout the season, which in some localities extends until frost.

"NEW OREGON" is a healthy, vigorous grower with luxuriant foliage, but has a marked characteristic of setting few runners. For this reason plants of the true strain cost a little more than other sorts. We introduced "NEW OREGON" in 1902 and growing tests with every promising variety obtainable have demonstrated its superiority.

Mr. Finnigan, the "Strawberry King," uses the "NEW OREGON" for his fancy pack, and picked 16,872 boxes from two acres in one season. See price list below.

To be sure of receiving the original strain of genuine "NEW OREGON" Strawberries send your orders direct to us.

Gold Dollar-Extra Early

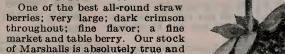
No early strawberry we have ever known equals our special strain of "Gold Dollars."

Gold Dollar berries are large size, dark red all through and have fine flavor. Foliage heavy, large and spreading, which protects the blooms from early frosts. Has a perfect bloom, and strong stems that hold the berries up from the ground, which helps to keep color and flavor during the early rainy season. Gold Dollar Strawberries are the standard early berry in the big markets of the Northwest and are al-

Gold Dollar Strawberries are the standard early berry in the blg markets of the Northwest and are always in demand. They are sure, heavy croppers, keep up their size throughout the season, and command the highest early prices. They are the handsomest, most prolific early strawberry.

## Popular and Best Western Sorts Magoon

Marshall



Originated near Portland; berry large, fine and excellent; subacid flavor; bears heavily throughout the season; especially adapted to Western Oregon and Washington.

We can promptly deliver LARGE ORDERS Fall or Spring COMMERCIAL GROWERS Write for Prices

a vigorous and prolific strain.

#### MAGOON

## **Clark's Seedling**

The berry that has made Hood River famous; best shipper, berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to dry soil.

## Wilson

An old standard variety; a heavy bearer of fine, moderate sized berries; sharp acid flavor and the leading sort for canning.

#### MARSHALL Gandy

A profitable market sort; its season is late to very late, being in its prime when most other sorts are gone. The fruit is large, handsome and uniform, and makes an excellent showing on the market.

			By express	
Price List of Plants			packed in	
I TICE LIST OF I TAILS	By mail,	postpaid	lated cr	ates.
	Dozen	100	100	1000
Clark's Seedling	\$0 . 30	\$1.00	\$0.60	\$4.50
Gandy		1.00	. 75	5.00
Gold Dollar		1.00	. 60	4.50
Magoon		1.00	. 60	4.50
Marshall.		1.00	. 60	4.50
NEW OREGON — IMPROVED	30	1.00	.75	5.00
Wilson		1.00	. 60	4.50
Not less than 500 plants of a kind at 1000 ra	te. Specia	al prices on 300	0 or more.	



ON REQUEST, OUR 32-PAGE BOOK ON STRAWBERRY CULTURE Complete and up-to-date. Things you should know about Strawberries.

FREE

### PORTLAND SEED COMPANY'S

## **Vegetable Plants**

WE grow large quantities of vegetable plants, and can supply all the kinds listed below, in their proper season, in most any quantity. We have made arrangements this year so that we can supply all vegetable plants in two grades. If you want a quantity of plants write us early.

Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. No plants sent C. O. D. Wrlte for paices in large quantities.

	Postpaid	By o	express
CELERY-	Dozen	100	
Leading kinds, transplanted	\$0.30	\$1.00	\$7.00
Not transplanted		. 50	5.00
	Postpaid	$\mathbf{B}\mathbf{v}$	express
TOMATOES-	Dozen	100	1000
Leading kinds, transplanted	\$0.30	\$1.00	\$7.00
Not transplanted		.75	6.00
Add 40c per 100 for To	mato Pla	nts by	y mail.
SWEET POTATO PLANT			

Add 25c per 100 for above Plants by mail.

	rostpara	23	CAPICOS
CAULIFLOWER—	Dozen	100	1000
Early Snowball, transplante	d. \$0.30	\$1.25	\$8.00
Not transplanted		1.00	7.00
Late kinds, transplanted		1.00	7.00
Late kinds, not transplanted	l	. 75	6.00
Add 25c per 100 for Cauli	flower Pla	nts b	y mail.
	D 4. 13	T	
	Postpaid	By	express
CABBAGE—	Dozen	100	1000
17 1 - / 1 - / 1 - /			

Postnaid By express

#### ROOTS

#### Rhubarb, or Pie Plant

GIANT-BEST HARDY VARIETY

- **ONE-YEAR-OLD ROOTS**—Postpaid, 8c each; 75c per dozen. By express or freight, 50c per dozen; \$3.00 per 100.
- TWO-YEAR-OLD ROOTS-Postpald, 15c each; \$1.50 per dozen. By express or freight, 85c per dozen; \$6.00 per 100.
- If wanted in larger quantities write for special prices.

NOTE—We advise our customers to order the above roots by express or freight, If possible. as it enables us to send much larger and better rooted plants, at a less cost to the buyer.

MASTERS' PLANT SETTER

## **Farm Tools**

#### **Master's Plant Setter**

For planting Cabbage, Tobacco, Celery and small plants of any kind With this handy little tool you can set, water and fertilize ten thousand plants per day.

You carry the planter in your right hand and drop the plants into it with your left. Each plant is securely set and the work is performed as fast as you walk. The **first thing** you do after the planter jaws are in the ground is to **touch** off the water, then drop the plant into the plant tube, give the planter a half-turn to the right, at the same time pressing down with the thumb lever. This will throw plenty of earth into the bottom of the hole on top of the roots and water, which will settle about the roots of the plant as the water soaks away, and at the same time fasten the little roots of the plant as the water soaks away, and at the same time fasten the little roots air-tight at the bottom of the hole, which is the secret of all plant setting. The upper part of the hole will fill itself by the action of the weather, and the plant will start growing much quicker than if set by hand. THE GROUND SHOULD BE DRY AND WELL HARBOWED HARROWED.

Absolutely sure in its work; no resetting; every plant watered and your field will all grow and come on evenly. By a light pressure of the thumb enough water is released for each plant; two barrels required for an acre in dry weather. You can mix fertilizer with the water, or use liquid manure. This planter is built entirely of sheet metal and steel. The manufacturers of the planter set from 30 to 50 acres of cabbage plants each year. It is simple, durable, practical and sure in its work. Price, each, \$4.50

A McWhorter Fertilizer Drill puts the Fertilizer just where you want it. No loss, no waste. Spreads 200 pounds to over a ton per acre broadcast or along the row. Adjusted instantly. See page 59.

Valuable books on Farming and Gardening Will be Found in Our Book List. Pages 60-61.

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CHIVES (Schnittlauch), per bunch......25c.

**Hop Vines** ENGLISH CLUSTER-The best sort. Strong roots, postpaid, 5c each; 40c per dozen. By express, 25c per dozen; \$1.50

per 100.

Write for prices if wanted by the 1000.

#### **Horse Radish**

Postpaid, 5c each; 40c per dozen. By express or freight, 25c per dozen; \$1.50 per 100. Write for prices by the 1000.

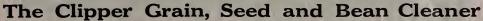
#### Asparagus

ONE-YEAR-OLD PLANTS-Postpaid, 25c doz., 75c per 50; \$1.00 per 100; By express or freight 20c dozen; 50c per 50; 75c per 100; \$6.00 per 1000.

TWO-YEAR-OLD PLANTS—Postpaid, 40c per dozen; \$1.00 per 50; \$1.50 per 100; By express or freight, 25c dozen; 75c per 50; \$1.00 per 100; \$8.00 per 1000.

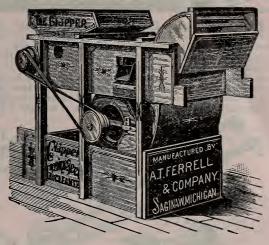
CABBAGE—	Dozen		
Early or late kinds,			
planted			\$6.00
Not transplanted		. 50	4.00

Add 25c per 100 for Cabbage Plants by mail.

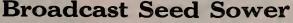


This is without doubt the best seed and grain cleaner on the market today. When it comes to doing real nice, clean work, it is far ahead of all the others. The "Clipper" is especially adapted for making effectual separation of wild oats, cheat, cockle and all foreign seed from wheat and oats, plantain from clover, etc., etc., as well as cleaning and grading the perfect seed. Other manufacturers depend entirely upon screens for this work and with unsatisfactory results. The "Clipper" however, screens all straw and foreign matter from the grain before it enters the air shaft, and the "Vertical Blast" does the rest. The screens are so arranged as to be in plain view, and of easy access to the operator while machine is in operation. Seed dealers every where use the "Clipper," because it is the best. We buy these cleaners in carload lots and have both hand and power mills. Descriptive pamphlet and catalog sent on request.

Price: No. 1, \$26.00; No. 2, \$35.00. We have four Clipper Cleaners in use in our warehouse, because they are the best cleaners made and the only ones that will clean and grade all kinds of grass, vegetables or farm seeds.



We have supplied "Clipper Cleaners" to the mills, dealers and prominent growers of the Northwest. If you grow grain or seed and do not own a "Clipper," you are losing many times its cost every year. Let us send you our "Clipper" Catalog. All sizes and prices





Little Giant

The best cheap seeder on the market, made in three sizes.

 No. 3
 Improved
 \$2.25

 No. 3
 2.00

 No. 4
 1.65

#### CAHOON

## Cahoon

The standard broadcast seed sower of the world, made of steel, iro<sup>n</sup> and brass and with ordinary care will last a lifetime. This is the most popular and best built seed sower; has a force feed and does excellent work-Instructions with each machine. **Price, \$3.50**.

## **Potato Planters**

### Peerless. (Fig. 16)

This is the lightest and best tubular planter made. With this planter one man can plant several times as much ground without getting a lame back as he can plant by hand. The planter locks itself as it is lifted out of the ground, so that the next potato may be dropped in at once, and opens automatically as the top of it is moved forward in walking. (See cut.) **Price, \$1.50.** 

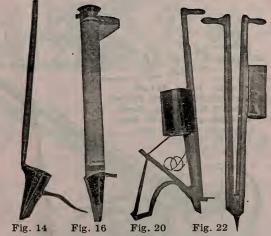
### Pingree or Acme. (Fig. 14)

Practically the same as the Peerless without the tube down the handle. You lift the planter up and drop the potato in the lower part. It is light and a very satisfactory planter. (See cut.) **Price, \$1.00.** 

## **Corn Planters**

#### Gordon Automatic. (Fig. 20)

Decidedly the best hand corn planter made, and a very desirable implement for those who have a quantity of corn to plant. It puts the corn (the right number of kernels) exactly where you want it, and at the proper depth. It is light, handy, automatic, easily worked, requiring only one hand (either one), and a most satisfactory tool in every way. (See cut). **Price, \$1.75.** 



Acme. (Fig. 22)

A two-hand planter; light, strong and durable. Especially adapted for planting in heavy, cloddy or stony soils. The seed dropper of the Ccme is a straight slide, which vibrates horizontally and will drop seeds ranging from pop corn to large kidney beans. Made with spring, brass cut-off and steel blades. (See cut). **Price, \$1.00.** 





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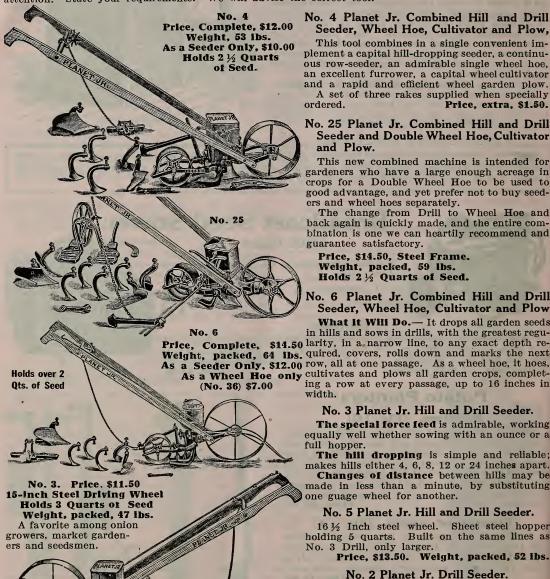
### PORTLAND SEED COMPANY'S

Planet Jr. Garden Tool

**F**OR over 40 years Planet Jr. Garden Tools have stood the test of world-wide usage, and are recognized in every known country as the highest type of garden implement. In Europe where labor is cheapest, Planet Jrs. are in constant use. How, then, can you afford to be without them where labor is both high and scarce? We cannot tell you all about Planet Jrs. in this catalog, but will send you the beautiful 64-page Planet Jr. book on request.

Many improvements are added for 1914, including steel frames for wheel hoes, instead of the malleable or cast ones and steel wheels for horse hoes and cultivators.

Being general selling agents for Planet Jr. implements, our stocks are large and orders will have prompt attention. State your requirements. We will advise the correct tool.



This tool combines in a single convenient implement a capital hill-dropping seeder, a continuous row-seeder, an admirable single wheel hoe,

(Plane

an excellent furrower, a capital wheel cultivator and a rapid and efficient wheel garden plow. A set of three rakes supplied when specially Price, extra, \$1.50.

## No. 25 Planet Jr. Combined Hill and Drill Seeder and Double Wheel Hoe, Cultivator

This new combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

The change from Drill to Wheel Hoe and back again is quickly made, and the entire combination is one we can heartily recommend and guarantee satisfactory.

Price, \$14.50, Steel Frame. Weight, packed, 59 lbs. Holds 2 ½ Quarts of Seed.

#### No. 6 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow

What it Will Do .- It drops all garden seeds in hills and sows in drills, with the greatest regu-Price, Complete, \$14.50 larity, in a narrow line, to any exact depth re-Weight, packed, 64 ibs, quired, covers, rolls down and marks the next As a Seeder Only, \$12.00 row, all at one passage. As a wheel hoe, it hoes, As a Wheel Hoe only cultivates and plows all garden crops, complet-(No 36 57 00 ing a row at every passage up to 16 inches in ing a row at every passage, up to 16 inches in

#### No. 3 Planet Jr. Hill and Drill Seeder.

The special force feed is admirable, working equally well whether sowing with an ounce or a

The hill dropping is simple and reliable; makes hills either 4, 6, 8, 12 or 24 inches apart. Changes of distance between hills may be

made in less than a minute, by substituting one guage wheel for another.

#### No. 5 Planet Jr. Hill and Drill Seeder.

16 1/2 Inch steel wheel. Sheet steel hopper holding 5 quarts. Built on the same lines as No. 3 Drill, only larger. Price, \$13.50. Weight, packed, 52 ibs.

#### No. 2 Planet Jr. Drill Seeder.

It is similar to No. 1 Pianet Jr., Combined Drill, but larger, holding twice as much seed, and having higher wheels and larger roller. Has no cuitivating attachment. Price, \$8.25.

Hoids 3 Quarts.

Weight, packed, 37 ibs.

#### **Attachments for Wheel Hoes**

4 ½-inch Hoes, complete. Weight 2 lbs per pair.

Per pair, \$1.00.

- Weight 2 ½ lbs. Per pair, \$1.60. **3 Prong Cultivator Teeth.** per pair.
- 8-inch Onion Harvester. Weight 1 ¼lbs. \$1.25.

15-inch Steel Driving Wheel Holds 3 Quarts of Seed growers, market garden-



Peat Land Hoes. Weight 2 1/2 lbs. per pair. Per pair, \$2.00. Disc Hoes. Weight 5 ½ lbs. per pair \$2.80. 6-inch Hoes, complete. Weight 2 1/4 lbs. per Per pair, \$1.10. pair.



#### No. 1 Planet Jr. Combined Drill Seeder, Wheel Hoe, Cultivator and Plow.



The sowing cylinder is a drum of spring brass set between the driving wheels, with a sliding brass band and cam. In drum and band are corresponding diamond shaped discharge openings, quickly adjusted for any kind of seed. Inside the drum, shields cover the openings, and insure regular sowing with a full hopper or a thimbleful.

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ordered. Price, extra, \$1.50.

Price, with Toois as shown, \$10.50.

PLANET JR. WHEEL HOES

**Double Wheel Hoes** 

No. 11 Planet Jr. Double Wheel Hoe, Cultivator, Plow and rake.

Weight, packed. Price, with Attach-39 ibs. ments as In cut, \$10.00



No. 12 Double Wheel Hoe, Cultivator and Plow.

This tool is identical with No. 11 Wheel Hoe, except that it has one pair plows, one pair hoes and two pair cultivator teeth only, and is sold at a correspondingly less price. Price, \$7.85. Weight, 34 ibs.

#### No. 13 Double Wheel Hoe

This tool is the No. 11, with 6-inch hoes, only, these being the tools that are most generally useful. Any or all of the other tools shown with No. 11 may be added at any time. **Price, \$5.50. Weight, 29 lbs.** 

#### No. 14 Planet Jr. Double Wheel Disc Hoe, Cultivator and Plow

This new tool will give excellent satisfaction; is especially pleasing to all who work peat lands. There are three oil tempered discs on each side. The frame is **steel**. The set of prong cultivator teeth are constructed on

entirely new lines, and will be found invaluable in general cultivation.

The plows are the regular Planet Jr. mold and are continually valuable for furrowing, covering and plowing. No. 14. Price, with Attachments, as in cut, \$9.00.

Steel Frame. 8



No. 38 Planet Jr. Single Wheel Disc Hoe, Cultivator and Plow

This combination occupies the same position among Single Wheel Hoes as that taken by No. 14 Planet Jr. ngle Wheel Hoes as that taken by No. 14 Planet Jr. the tools that are most constantly useful ouble Wheel Disc Hoe among Doubles. Price, complete, \$7.85. Weight, packed, 28 lbs. added as needed. Price, \$4.25. Weight, 20 lbs. Double Wheel Disc Hoe among Doubles.

A pair of 5 tooth rakes supplied when specially Holds 3 Pints of Seed. Weight, packed, 44 ibs. Single Wheel Hoes The handles are adjustable in height.

The frame is steel, convenient and strong with quick change device by which to exchange with The frame is steel, convenient and strong with quick change device by which to exchange the tools without removing the nuts.

Nos. 16, 17, 17 1/2 and 18 wheels, frames and handles are alike, but the attachments sold with each vary.

The hoes are the most valuable of all the wheel hoe attachments; are oil tempered and polished. Use the 4-inch for 6, 10 or 12-inch rows; the 6-inch, for rows 12 inches and upwards,

The Plows are invaluable; use them with points together for opening furrows for manure, seed, etc.; then exchange sides for covering; use them also for plowing away from or toward the crop, both sides at once.

The cultivating teeth for deep or shallow work, and for marking out.

Leaf lifters save time and enable fine work to be done close to the row without additional labor, when plants are large or leaves are flat on the ground.

No. 16 Planet Jr. Single Wheel Hoe, Culti vator, Rake and Plow.

> Price, \$6.50. Steel Frame. Weight, 25 ibs.

#### No. 17 Planet Jr. Single Wheel Hoe.

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outilt sufficient for most garden work. Price, \$5.75. Weight, 23 ibs.

No. 171/2 Planet Jr. Single Wheel Hoe. This tool is identical with No. 16, except in equipment. The pair of 6-inch hoes, three cultivator teeth and leaf lifter which go with it, are all the finest of their kind.

Price, \$5.25. Weight, 21 ibs. No. 18 Single Wheel Hoe.

This tool has one pair of 6-inch hoes only -

#### **IRON KING SEED DRILL**—For Onion Growers

The Iron King Seed Drill is acknowledged by the majority of the large onion growers of Oregon and Washington to be the most practical of drills for sowing onion seed. It is a well made, durable and easy running machine, accurate and reliable, and with careful use will last a lifetime. It will save the price of the machine in sowing a few acres. If you are growing onions you cannot afford to be without one. The Iron King can also be set to sow anything from turnips to peas. Price, \$9.25.

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### PORTLAND SEED COMPANY'S

anet Jr. Garden Tools

No. 8 Planet Jr. Horse Hoe and Cultivator With Steel Wheel Price, \$10.75

Weight, packed, 83 lbs.

#### **Planet Jr. Horse-Hoes**

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again.

#### No. 9 Planet Jr. Horse Hoe and Cultivator With Steel Wheel

### Price, \$9.00. Weight, packed, 70 ibs.

This admirable tool has a plain wheel in-stead of lever wheel. It has the high frame, patented hollow steel standard, patent lever Star wheel, patent lever expander, and hollow steel wheel arms.

No.81. Price, \$11.75 With Steel Wheel Weight, packed, 90 ibs.

#### No. 81 Planet Jr. Horse Hoe, Cultivator and Hiller Combined

This is the latest and best tool of the kind. Has six 3-inch culti-vator teeth, two 6-inch side plows and a 12-inch furrowing tooth, making an admirable equipment for all widths of cultivation and for hilling crops up to four feet ipart.

It has a cultivator tooth central in front, which increases the steadiness of the tool.

#### Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer

With the Twelve-Tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil and mellow and fine it as with a garden rake. You widen and narrow as you please between 12 and 32 inches. It's a special favorite with strawberry growers, market gardeners and truckers.

A strawberry runner cutter consisting of a 10-inch flat steel disc mounted on an outrigger. Price, extra, \$2.30.

With One-Tooth No. 41 Planet Jr. Orchard and Universal Cultivator

The steel wheels are low and entirely en-closed by the frame. The tongue is steel.

The frame is high carbon steel, compact in form, well braced, heavy and strong.

Without the extension, it cuts 4 feet in width, having seven stiff steel standards, carrying 2<sup>1</sup>/<sub>4</sub>x10-inch teeth.

With the extension, it cuts 6 feet 6 inches, carrying eleven teeth, and the frame can be changed to cut any width from  $6\frac{1}{2}$  down to 4 feet.

Disc Harrow Attachment. We sell as an attachment to No. 41 a set of five pairs of discs, making a capital disc harrow.

The New "**PLANET JR.**" Catalogue is the handsomest, best, and most instructive book ever issued on a similar subject. Full of little points that bring profit. Full of true and handsome illustrations. We mail it free to any address on application.

THE NEW PLOW Attachment **Fits all** Horse-Hoes See Pianet Jr. Catalog.

**12-Tooth Harrow** With Steel Wheel **Complete**, \$10.75 Weight, packed, 73 ibs. Without Puiverizer, \$8.85 Price, plain, \$7.30

NETJR

Demesso

**Price with** Two-Tooth Extensions, \$55.00 Weight, packed 488 ibs.

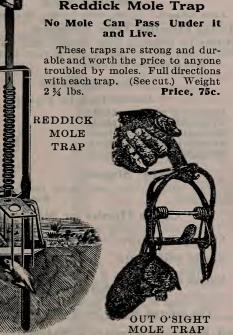
Extensions, \$51.50 Without Extensions \$45.00

COMPLETE SEED ANNUAL



Like a human hand the fingers of the "Norcross" work closely around the plants without injury. Keeps down weeds, saves moisture, leaves the ground level.

PRICES.— Five prong for regular garden work; 4-ft., weight 3 lbs., \$1.00; 3 prong, lighter in No.212 No.211 No.214 No.213 No.217 weight, for narrow rows and close work, 4-ft., weight, 2 lbs., 75c; 3 prong "midget," 9-inch handle for flowers or close hand work, weight, 12 ozs., each, 35c.



OUT O'SIGHT MOLE TRAP.— Weight, 2 lbs. One of the best—Sure to "get them." Price, 75c.

Whitney Rodent Torch

WHITNEY RODENT TORCH.- Exploded in the runway the poisonous gases penetrate all parts and suffocate the animal — specially effective against moles — express or freight (cannot be mailed); pkg. of 25, weight, ½ lb. Price per pkg.

60c. GOPHER TRAP.— California Box. Similar to "Out O'Sight," except this trap has sides boxed Similar to up; this leads the gopher to the correct position for prompt execution; the most popular trap — never fails. weight 1 lb. **Price, each, 25c.** 

#### "GOPHER-GO"

#### Machine Poisoned Raisins and Grain.

Sure death to Gophers, Sqirrels, Prairie Dogs, Rabbits, Rats, Mice and all Rodents. An attractive bait, thoroughly poisoned. The only one that gets them.

Price, put up in tins, Weight 11 ozs., 25c; Wt. 27 ozs. 50c; Wt. 5 1 lbs. \$1.00' Wt. 10 lbs. \$3.00



#### Fig. 26

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### **Garden** Trowels

See descriptions of numbers on cuts.

Don't class these tools with the cheap stock of-

For the department stores. (See cut.)
No. 211. Six inch; blade and shank of one piece of forged steel. The best tool of its kind in the market. Weight <sup>3</sup>/<sub>4</sub> lb. 50c.
No. 213. Six inch; good steel trowel, with mal-

leable iron shank, firmly riveted. weight ½ 1b. 15c. No. 214. Six inch; steel trowel, stronger and

better finished than the above. weight 34 lb. 25c.
No. 212. Six inch; solid steel; a first-class trowel. weight 34 lb. 35c.
No. 217. Six inch steel transplanting trowel.
Weight 1/2 lb., 20c.
No. 217. Bight inch steel transplanting trowel.

No. 217. Eight inch; steel transplanting trowel. Weight, 1/2 lb. 25c.

No. 217A. Transplanting hoe trowel, used by

gardeners in setting out plants. Wt. 1 lb. 50c.
No. 216. Ladies' flower trowel. wt. ½ lb. 10c.
No. 216A. Special Bulb Trowel. Wt. 1 lb. 75c.

#### **Dandelion Pullers**

Fig. 26. Vaughn's (see cut). A most convenient tool for digging these troublesome weeds. Wt.1 lb.50c



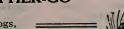
### The Official Rat Trap

The Government selected this trap from among thousands of models submitted. Spring releases with either upward or downward pressure—**Rats** Nibble Upward. The "Official" always gets them. Official Rat Trap, weight, Each, 20c. Official Mouse Trap, Each, 05c.

#### Portland Seed Co.'s Gopher Gun

Far superior to the old styles; breech loader; place in the runway; perfectly safe. Made for 16gauge shells; discharged by a push and can be set for hawks, coyotes and coons. Weight 3 ½ lbs. for hawks, coyotes and coons.

Price, \$1.75.



Gopher- Go " **Never Fails TRY IT** 



PORTLAND SEED COMPANY'S

IVES

Will send any of the following knives postpaid at these prices. See numbers on cut.

**Budding Knives Prices** Postpaid. Ebony handle, No. 8. stationary ivory bark opener. Price, \$1.00. No. 8 1/2. Same as above, only size Price, \$1.25. larger. No. 10. Ivory handle very light and fine. Price, \$1.00. No. 10 1/2. Same as above, only

Price, \$1.25. size larger. No. 12. Brown handle; very light Price, 85c.

and fine.

F1g. 28

**GRASS SHEARS.** 

Weight 1 lb.

116

No.13. Plain wood handle, stationary blade. 25c. Budding and pruning knife combined. No. 5. Price, \$1.00.

#### **Grafting Knives**

No. 6. Plain wood handle, stationary blade.

Price, 35c. No. 7. Plain wood handle, stationary blade; Price, 25c. smaller.

No. 9. Special Henckels Grafting Knife - has extra heavy brass lining, brass rivets, blade set deep in handle, giving great strength. Price, each, \$1.00.



6-in. blade. (See cut, Fig. 28.)

" SCALECIDE " Spreads and Penetrates Easy to use Page 96

Each, 60c.

Price, \$1.00.

Weight. 34 lb.

"Keen Kutter" Best made.



#### **Pruning Knives**

Note.- See numbers in descriptions. No. 2.

Plain wood handle, stationary blade. Price, 50c. No. 3. Large horn handle, very strong.

Price, \$1.50.

No. 4. Polished wood handle. Price, 80c.

### **Grafting Wax**

**Lion Brand** 1/4-1b., 10c; 1/2-1b., 20c; 1b., 35c. Long Handle Tree Pruners

Indispensible in Pruning Tall Trees. (See Cut.) 6 feet, 75c; 8 feet, 90c; 10 feet, \$1.00; 12 feet, \$1.15. Extra Blades 15c each.

#### **Pruning Saws**

#### Add 10c Each for Postage.

Crescent, 12-inch	blade65c.
Crescent, 14-inch	blade
Straight blade, 16	5-inch
Straight blade, 18	8-inch
Straight blade, 20	)-inch70c.

#### **Flower Shears**

Nickle-plated; with springs; cuts and holds the flower from falling until opened again. Postpaid, \$1.25.

#### **Grass Hooks or Sickles**

These are the latest style and shape. Weight, 3/4 Clark. First-class, detachable blade. Price, 45c. lb. Village Blacksmith. No. 2. Hand forged. Price, 50c. weight, 1/2 lb.

Village Blacksmith. No. 3. Weight, 1/2 lb. 60c. Raffia For tying plants and buds. Lb., 25c.

Wooden Labels

For colored Raffia See Page 127.

## Miscellaneous Florists' and Nurserymen's Supplies

**Plant Stakes** 

**Grape Shears** 

Holds fruit or plant until released. Postpd, \$1.00.

Round cedar, painted green, white tops. 3 ft., 75c doz.; 3 ½ ft., 80c; 4 ft., 90c; 5 ft., \$1.30; 6 ft., \$1.75.

GRASS SHEARS.

Fine for trimming borders and edges, good make;

#### Pencils

Indelible, nickle tip, for marking labels. Each, 15c.

Oregon Moss

We have this gathered, dried and put up in bales of about 100 lbs. each for florists' and nurserymen's Write for price by ton or carload. Per lb., 5c; 100 lbs., \$3.00. use.

**Tin Foil** Per lb., 15c. Florist. Regular stock. Wire Designs

Every description. List on request.

Wire Hanging Baskets

8 in., 20c; 10 in., 25c; 12 in., 30c; 14 in., 50c. ■ FLORISTS

**Tree Labels** 

Painted iron wire. Per 100, 15c; per 1000, \$1.00. Unpainted iron wire. Per 100, 15c; per 1000, 85c. Painted copper wire.

Per 100, 20c; per 1000, \$1.10. Unpainted copper wire.

Per 100, 20c; per 1000, \$1.00.

#### Pot Labels

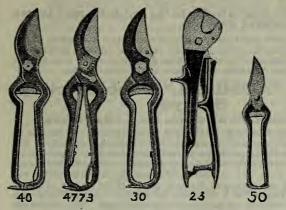
per 15c; 1000, 75c: Plain, 100. 4-inch. Painted, 1000, 85c. 80c; 100, 20c; /1000, Plain, per 1000, \$1.05. 5-inch. per painted. 100, 20c; 1000. \$1.25: 6-inch. Plain, рег painted, 1000, \$1.40. Plain, 100, 30c; 1000, \$1.50: 8-inch. per 1000, \$1.75. painted,

We carry a large stock of up-to-date Supplies-the very best linesand your orders or inquiries will have prompt attention. We can save you money and give you prompt service. WRITE OR WIRE.

#### COMPLETE SEED ANNUAL



## **Pruning Tools Knives, Weeders, Etc.**



BOOKS ON PRUNING The latest works of the best authorities SEE PAGES 60-61 NOTE.— Compare numbers on cut to those in descriptions.

No. 4773. 9-inch; full polish, with double brass springs; best American make. Weight, 1 lb. Price \$1.50

Price, \$1.50. No. 40. 9-inch; bright finished, polished blade, spiral steel spring; made for hard service. Weight 13 ozs. Price, \$1.00.

No. 41. Same as No. 40, except with ratchet nut. Weight 14 ozs. Price, \$1.25.

No. 30. 7-inch; German make; black finish; polished blade; very good. Weight, 14 ozs.

Price, 75c. No. 31. Same as No. 30, only 9-inch ratchet nut; an American make. Wt. 14 ozs. Price, \$1.00.

No. 59. Thinning Shears. Weight, 6 ozs. Price, 35c No. 50. 5 %-inch, nickle-plated; small, but of

best material; fine for ladies. Weight, 4 ozs. Price, \$1.00.

No. 51.Same as No. 50, except that it is  $6\frac{1}{2}$ inches long.Weight, 5 ozs.Price, \$1.25.No. 23.Levin Pruner, 7-in.; cuts clean; cuts $\frac{1}{2}$  inch.Weight, 10 ozs.Postpaid, 60c.

DIAMOND NO 4 The Best Fertilizer for fruit trees—Increases the yield, heightens the color, makes long keepers.—Ask for Free Book—FERTILIZERS.



Bastian

Tree Pruner

The New Bastian Pruners Makes a Clean, Sharp Cut.

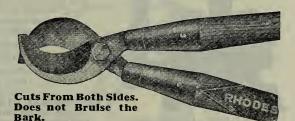
The Powerful Lever on the Bastian Pruner is a wonderful improvement over other methods of construction, enabling you to work easily and rapidly doing the same work in half the time and with half the labor that would be required with old style Pruners.

The Blades are of finest Damascus steel, are very strong and hold 'heir cutting edge. Simple in construc-

Simple in construction, light, strong and durable. We recommend the Bastian to every fruit grower. Ea. 5 to 7 ft \$1.25 " 8 " 11 " 1.50 " 12 " 16 " 1.75 Extra Blades, 15c each Bastian Pruning Shears

Built on the same principle as the pruner, intended for light work where a hand shear would be used. You can round up young trees or trim bushes, cut suckers, etc., standing

on the ground. Makes quick work, no straining or stooping. Price 5 to 7 feet ......\$2.25 8 to 11 feet .......2.50 12 feet .......2.75 Extra Blades, \$1.50 per pair. **Rhodes Double Cut Pruner** 



The overlapping incurved points prevent the double edges from cutting each other. This is the most powerful and cleanest cutting shear made. Built for hard service. Notice the heavy ferrules and rivet through the shank. They can't work loose-Length, 30 inches. Weight, 3 ½ lbs. **Price, \$2.50**.

#### **Branch Shears**

Fig. 126. This has no equal in its class; is forged from high-grade tool steel; finely tempered, solid wrought steel ferrules. Patent lock nut. Cannot work loose and ruin shears. 26-inch handle. Weight 3 lbs. Price, \$1.75.

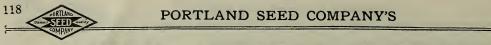
Fig. 35. Standard pattern. Satisfactory for light work; a good value.

26-inch handle, weight,  $2\frac{1}{2}$  lbs., 75c; 41-inch handle, weight, 3 lbs., 90c.

#### **Five of the Best Hand Weeders**

Fig. 21.	Lang's. Weight, 6 ozs
Fig. 22.	Combination. Weight, 6 ozs. 25c.
Fig. 23.	Hazeltine's. Weight, 6 ozs 30c.
Fig. 24.	Excelsior. Weight, 6 ozs20c.
Fig. 25.	<b>Noyes'.</b> Weight, 4 ozs <b>25c.</b>

SCALECIDE is an unfailing remedy for all scale and fungus. Will not injure your pump or equipment, easy to apply, spreads and penetrates



## **GOULDS SPRAY PUMPS**

We are General Agents for the Gould Sprayers, guaranteed to be the best built, most lasting and of the highest efficiency. They are the recognized standard.

Every grower of fruit, berries, or flowers should have a good spray pump of some kind, one suited to the work that is to be done. If you want to get the best results, you must spray and spray often. Remember, a person derives the same satisfaction from using a good spray pump that he does from using a good article of any other kind; so when you buy, get one of the following up-to-date and reliable outfits.

## Gould's "ADMIRAL" Double Acting Sprayer

#### For Large Orchards, Parks, Groves, Etc.,-Very Powerful.

The "Admiral" is double acting and produces a steady stream at the nozzle, is built for continuous hard work and high pressure. Especially designed for large orchards, and will meet every requirement. The brass cylinder lining is of heavy seamless tubing, with a cast bronze cylinder head, and can be easi.y removed, as shown in the engraving. This is an important feature, as the gritty nature of many of the spray mixtures has a tendency to cut the cylinder lining, and when it is badly worn it can be replaced at small cost. The valves are all brass, and each one in a separate valve box. They are easily reached by removing the bronze valve box covers. The brass piston rod is outside guided, making a perfectly straight thrust through the stuffing box, which is outside packed.

The removable malleable iron lever is long and powerful, and with the large air chamber a high pressure can be easily maintained. Suction can be taken from either side of the pump, and there are two discharge openings fitted for  $\frac{1}{2}$ -inch hose. When ordered without hose or nozzle, both discharges have half couplings for  $\frac{1}{2}$ -inch hose and a brass strainer.

This Sprayer is of sufficient capacity to supply, if necessary, four leads of hose, or two leads, each with two, three or four nozzles, and will be found fully as serviceable as a power sprayer for orchards not large enough to warrant the purchase of a power outfit.

This same pump fitted with a pitman in place of lever for connection to gasoline engine.

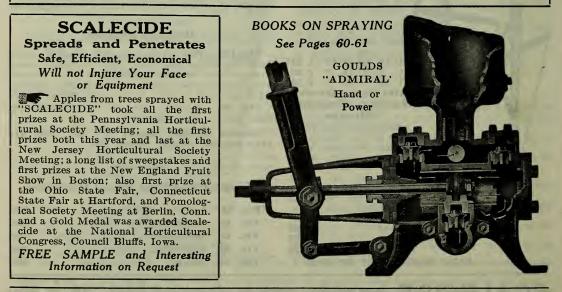
Outfit A.—Pump only, with strainer and suction hose coupling \$30.00

Outfit B.—Pump with 8 feet suction hose and strainer.... 32.75 Outfit C.—Pump with 8 feet suction hose, two 25-foot leads

best ½-inch hose, two 8-foot bamboo extensions, with Globe valves and nozzles.....

#### **. POWER OUTFITS**

We assemble outfits in any manner desired by customer, and suggest the right attachments for special purposes. Attaching any standard engine specified. Write us your requirements. We can save you money and guarantee a satisfactory equipment.



Corona Dry Powdered Arsenate of Lead is Best—See Page 125.

ADMIRAL (Fig. 1608).

THE PRINCIPALS of FRUIT GROWING

BAILEY

\$1.65

516 pages, \$ POSTPAID



## SPRAY PUMPS AND SPRAYERS—Continued Monarch Two-Cylinder Spray Pump

Fig. 1506.— Monarch — This pump has many advantages, and we believe it is the best of the large pumps. The main advantages are: First, the long lever, which can be shifted to pull or push, or to lift or drop, and can be changed by the operator any time he desires a relief; second, pump stands outside of the barrel, and all parts can be easily looked after; third, cylinders are perpendicular, and any grit will not lie against the plunger, to wear it or the packing out, as in the case with the horizontal cylinders; fourth, there are no valves in the plungers; the packing is on the outside, and can be tightened any time, without taking anything to pieces; fifth, the four brass valves (each one by itself and under a separate cap), can be reached by merely unscrewing the cap, and without disturbing the rest of the pump.

#### -Take Care of Your Sprayer-

Always empty remaining solution, and pump through some clean water after using. Clean thoroughly before putting away at end of season.

Never leave sprayers containing liquid where they will freeze; if the cylinders are iron they are apt to crack and if brass they will expand.

**Spreads and Penetrates** 

An inexperienced or careless man can do a thorough job with Scalecide where he would fail to get a good distribution with Lime and Sulphur. Page 124. Fig. 1506. MONARCH

We recommend the use of a pressure gauge on all large pumps, as it accurately tells the force of spray when delivered.

Gould's Pomona-Our Leading Barrel Pump

Fig. 1100.—"'Pomona" Spray Pump has won for itself an enviable reputation. We unhesitatingly offer it as the best orchard spray pump for mounting in a barrel. It has great power and capacity. Briefly stated, other points of superiority are: No leather packings, consequently no hardened and useless valves. All workings parts bronze, including plunger, gland, valves, valve seats, etc. Plunger is outside packed. Valves are easily accessible. Air chamber is very large and of steel, free from imperfections of cast iron. Lever long and powerful, with adjustable stroke, three, four of five inches. The agitator, as shown in the cut, is operated by the stroke of the handle, so whenever any liquid is pumped it is thoroughly agitated. Pump is held securely by small anchor located at bottom of barrel, and by adjustable clamp plate at the top. New plate admits insertion or withdrawal from barrel with out removing the agitator.

> FRUITALL Fig. 1188



## Fruitall

Fig. 1188.—"Fruitall" Spray Pump is made on the same general lines as our famous "Pomona." It is, however, made lighter and of smaller capacity. All working parts, including plunger, gland, valves, valve seats and strainer are made of brass. Pump is held in barrel by anchor at bottom and adjustable clamp at top, fitting over end of stave. Not made for side of barrel.

Outfit A.— Pump only ......\$11.00 Outfit B.— Pump with 15 feet of 4-ply spray hose

NOTE. — Extra 5-ply hose at 13 ½ cents per foot.

Planet Jr. Special Orchard Cultivators Are Strong, Light, Easy Running, Durable, Adapted to Every Need–Page 114.



# 

washing.

## Hand Pumps and Sprayers

## **Premier Bucket Pump**

Fig. 561 1/2 .- Brass bucket pump, arranged with suction and discharge hose and spray nozzle, which will throw a solid stream or fine spray. Pump has brass cylinder plunger and rod, and is particularly adapted for washing windows and wagons, spraying flowers in conservatories, gardens, etc., etc. Price, complete, \$5.75.

### **Bordeaux Bucket Pump**

Fig. 1129.—Brass garden and spray pump; is especially designed for spray-ing in gardens and greenhouses. The pump is double action in effect; Seneca nozzle, ball valves; proof against the action of acids and oils. Footpiece is malleable iron. Pump is set in pail or bucket, with foot outside. Weight 6 ½ lbs. Price, complete, \$4.50.

#### Portland Seed Company's Handy Carts All Metal Parts Malleable 'Steel, Strong, Light, Built to Last

No. 4 Barrel Cart



120

City and

Suburbs

IDEA

NDT

Will pick up any kind or size of barrel from a lime to large spray barrel, holding it firmly; no attachment necessary on the barrel. Contents can be emptied by simply raising the handles. Has 36-inch Wheels, 2 ½-inch elliptical rims, 7% inch steel axle; weighs, K. D., 70 pounds. A Price, \$8.00.



The "Ideal" has been designed for small grow-

Out-

ers, city and suburban homes, and for all purposes

where nothing as large as a barrel or power outfit is needed, and is the right outfit for the poultryman who does much regular spraying or white-

Is Light, Compact, Easy to Operate. Tank holds 15 gallons; will not slop or spill. Pump has large air chamber. Bronze ball valves; valves are re-movable, cannot clog. Well made; gives a pressure of 150

lbs; has mechanical agitator and strainer for suction.

**NO. 1 PLATFORM.** Best cart for general use. Will carry four large milk cans, sacks of potatoes, wood, barrels, in fact, anything heavy can be easily and quickly handled. Platform 27x30 inches; 36-inch wheel;  $2\frac{1}{2}$  inch elliptical tire. Neatly finished and painted. Weight, K. D., 85 pounds. **Price, \$8.75** 

### COMPLETE SEED ANNUAL



SPRAY PUMPS AND SPRAYERS-Continued

LIGHTNING All Brass Bucket Pump.

Brass Ball valves, Brass Plunger — handle and stirrup malleable iron. 3 feet of best hose, two brass nozzles, one for spray and one that will throw a stream of water. Has large air chamber making possible a pressure of 50 to 100 lbs. The best value offered in a bucket pump.

NOZZLE

LIGHTNING"

Price, each, \$3.00.

"HOW to Spray, WHEN to Spray, and WHAT SPRAYERS to Use."

Tells all about sprays and sprayers, and how to make the best "white wash."

Ask for a Copy.



Made of strong galvanized steel with locked seams tested to 60 lbs. air pressure. Brass pump-seat, bronze ball check-valve easily removable, seamless brass cylinder 1½ diameter, solid brass non-corrosive, self cleaning nozzle with spiral point, producing whirling spray, an exclusive patented feature producing a finer and better spray than any other pressure sprayer.

Capacity 3 gals., adjustable carrying strap. 3 foot extension. Price, each, \$5.50.

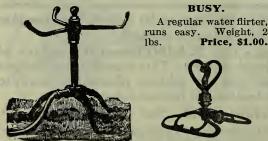


**Stable Manure** that is allowed to decompose by exposure to weather loses a large part of the NITROGEN its most valuable element.

You can save this loss by scattering a little KAINIT over the surface of the manure each day, about a pound per head of stock. This prevents the nitrogen from escaping, retaining its original value, and by adding phosphoric acid to manure thus treated you have a complete fertilizer of highest value.

For Price of Kainit, Potash and Phosphoric Acid—See pages 58 and 59. OUR FERTILIZER BOOKLET tells about Fertilizer—gives analysis and instructions for use. An interesting and valuable book you should have.—FREE ON REQUEST.





PACIFIC

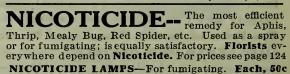
BUSY

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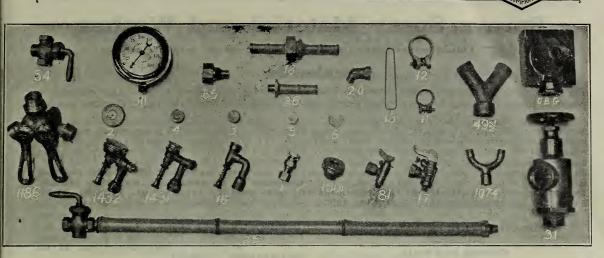
## **Kinney Siphon Pump**

No florist or gardener can afford to be without this practical device. It is invaluable for applying liquid manure spraying, tempering water or drawing water out of furnace pits; made of solid brass; will last a lifetime. Weight, 1 1/4 lbs.

Price, each, \$2.50.



#### COMPLETE SEED ANNUAL



## Nozzles, Connections and Hose Supplies

Fig. 1501, Mistry Jr. Best hop nozzle; throws a perfect spray; of greater capacity and a great improvement over other nozzles; produces a fog in great volume at a light pressure. Weight 6 ozs. Price, \$1.25; extra disc, Fig. 6, 25c.

Fig. 1431, Mistry Nozzle. The latest thing in spray nozzles. It produces a perfect mist or fog with small pressure. Weight 4 ozs. **Price, \$1.00; extra cap. Fig. 4, 15c.** 

Fig. 1432. Large Mistry. Same as above, but is larger, and has a swivel adjustment, which allows the spray to be thrown at any desired angle. Weight 8 ozs. Price, \$2.00; extra cap, Fig. 2, 30c.

With degorger, Fig. 16. Vermorel Nozzle. affords a conical discharge. Very popular. Weight 4 ozs. **Price, 75c; extra cap, Fig. 3, 20c.** 

Two-Discharge Vermorel. Covers twice the surface sprayed by the single nozzle. It is the nozzle for general orchard work. Weight 1/2 lb. Price, \$1.75. Fig. 81. Seneca. Gives a very wide spray; dis-charge easily graduated. Weight ½1b. Price, 75c. Fig. 1. Bean's Best. Best long-distance nozzle.

Weight 2 ozs. Price, 75c; extra cap, Fig. 5, 20c. Fig. 17. Bordeaux. Use this nozzle for white-

washing. Price, 75c. Fig. 51. Cyclone Nozzle. With side discharge.

Weight 2 ozs. Price, 75c. Fig. 20. Nozzle Ell. Weight 2 ozs. Price, 25c.

Fig. 30. Pressure Gauge. Weight 1 ½ lbs. Price, \$1.50

Fig. 31. Relief Valve. Wt. 3 lbs. Price, \$4.00.

Fig. 26. Hose Connection. Weight 1/4 lb.

Price, 25c. Fig. 65. Hose Reducer. Wt. 3 ozs. Price, 30c. Fig. 1186. Double Cut-off. Weight 2 lbs.

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Price, \$2.00. Fig. 49 1/2. Brass Y, 3/4-inch, for hose coupling. Weight 1 lb. Price, 75c.

Fig. 1074. Weight ½ lb. Brass Y, 1/4-inch, for nozzle only. Price, 50c.

Brass Yerdon's Bands, 1/2 or Figs. 11-12. ¾-inch. Postpaid, each, 5c; doz., 50c. Fig. 13. Caldwell Bands.

Per doz., postpaid, ½-inch, 25c; ¾-inch, 30c.

Gem Hose Nozzle. One of the best for yard use. Weight 1/2 lb. Price. 40c.

Fig. 25. Bamboo Extension. Has iron pipe inside of bamboo, threaded for nozzles and stopcock. Price, with stopcock (Fig. 54)-

Bamboo Iron Bamboo Iron \$.90 1.00 10 ft....\$1.65 2 to 4 ft....\$1.25 \$1.20 6 ft.... **1.35** 8 ft.... **1.50** 12 ft.... 1.80

1.10

Aluminum Extensions, Per foot. 30c. Fig. 54. Stopcock. Weight ½ lb. Price, 50c. Fig. 18. Hose Coupling. 2½-inch shank, for heavy pressure spraying.

For ½-inch hose, price, per pair, 65c, postpaid. Hose Couplings, for garden hose, 1/2-inch or <sup>3</sup>/<sub>4</sub>-inch, complete. Price, po Hose Washers. <sup>1</sup>/<sub>2</sub>-inch, rubber. Price, postpaid, 25c. Doz., 10c.

C. B. G. Lawn Sprinkler. Price. 35c.



For Cold Water Paint and Whitewashing.

Made especially for whitewashing and other methods of painting. Fig. 1495. It has a large opening inside, with rounding corners, to prevent clogging. The spray opening has steel disc and a lower cap, which can be removed for cleaning at any time. This nozzle is superior to any other on the market for this purpose. Wt., 5 oz. Price, 75c

The "Lenox" Nozzle

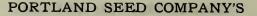
#### Diamond Quality Roses =

Clinton, S. C. 11-25-13. Dear Sirs:-- You will be interested to know that the three trees sent to me have been received and were in fine condition. I have two Carolina Test-outs and one Frau Karl Druschki from you that were set three years ago. They are beautiful. MRS. A. E. SPENCER.

#### North Bend, Oregon, 11-17-13.

Gentlemen:- The Lawn Grass seed and Rose Bushes I received two years ago are the best that I have ever planted. Especially the Roses. are beautiful. They

W. G. INGRAM.



## Sprays, Spray Material and Washes

Liquid sprays cannot be mailed. Solid sprays, extra for postage.

## Scalecide

The best miscible oil spray for San Jose scale and all soft-bodied, sucking insects. Also contains a powerful fungicide, which will control all fungus diseases that are controllable in the dormant season.

This assertion is not based on a single test on ten or a dozen trees, but on actual work in great com-mercial orchards, where thousands of gallons of spray were used. "Scalecide" is a petroleum oil that mixes readily with cold water in any proportion, and stays mixed. It is not necessary to use an extra tank or barrel, and no hot water should be used. Prepared by adding one gallon of "Scalecide" for every fifteen or twenty gallons of water, right into your spray tank. No crude oil is used in the manufacture of "Scalecide" all the light and heavy oils that might prove injurious being removed —but all of the soluble sulphur is retained; this has the insecticidal value. That "Scalecide" is an absolutely unfailing remedy for San Jose Scale is attested by the thousands who have used it. Price per qt., 35c; gal., \$1.00; 5 gals., \$4.00; 10 gals., \$7.50; 50-gal. bbl., 28.50. Send for free sample and printed matter concerning "Scalecide."

#### **Diamond Lime and Sulphur** Solution

For San Jose Scale.

124

#### You can not afford to risk a cheap open kettle product. Be safe. Use the best.

Diamond Lime and Sulphur Solution is prepared in pressure tanks by steam, and is always uniform

The "Lime and Sulphur" Solution for San Jose scale is endorsed by experimental stations and state horticultural societies of all the fruit-growing states. It is recognized and recommended as the best known preparation for exterminating San Jose scale on all deciduous trees.

Our Lime and Sulphur Solution tests 30 Baume Scale, is made of the purest and best quality of Sublimed Sulphur and of Lime that tests 99.98 per cent pure. It is a clear, deep cherry colored liquid free from sediment and is a beautiful product, is very reasonable in price, and its work is perfect. It is already to mix just as you get it. Merely add 11 gallons of water with each gallon of the Lime and Sulphur Solution. There is no sediment to clog the sprayers. No boiling to be done, which saves fuel, time, labor and annoyance. It is always alike and uniform in strength and results.

Price, 1 gal., 50c; 5 gals., \$1,50; 10 gals. \$3.00; 50-gal. bbl. \$8.00.

#### PORTLAND SEED COMPANY'S Aphiscide **Best Summer Spray for Roses**

A clean, sure, safe spray for aphis, thrip, and kindred insects on plants of any kind. Specially fine for house plants, as it has no offensive odor and will not injure or stain the plants.

Price, qt, 25c; gal. 60.

- ARSENATE OF LEAD. -- (Paste). The best insecticide for all leaf-eating insects; it will not burn the foliage, and stays on the trees longer than any other arsenical compound.
- Price: 1 lb. can, 20c; 5 lb. can, 90c; 10 lbs. \$1.50; 25 lbs. \$3.00; 50 lbs: \$5:65; 100 lbs: \$10.00.
- BLUE LABEL SLUG DESTROYER .- This is the first powder of its kind that we ever found to positively kill slugs and keep them away from young plants. Full directions on each package. Put up in 25c, 50c, and \$1.00 packages. 25c packages will be sent by mail, postpaid, for 35c.

BORDEAUX MIXTURE .--- (Lion Brand). For fungi-in liquid form. Dilute with 49 parts of water. 1 qt., 50c; 1 gal., \$1.40.

BLUESTONE.-(Vitriol). Lb., 10c; per 100 lbs., market price.

**BUG DEATH.** — A non-poisonous insect-killing powder that is in high favor among gardeners for cabbage, tomato and cucumber bugs, etc. Use 12 lbs. per a cre. Per lb: 15c; 5 lbs: 65c; 100 lbs. \$10.00

FIR TREE OIL SOAP .- For killing green aphis. 1/2-lb. can, 25c; 2 lbs., 75c.

- HAMMOND'S SLUG SHOT. For destroying slugs, cabbage and turnip flea, currant worms, etc. Per lb., 15c; 5-lb., pkg., 50c.
- HAMMOND'S GRAPE DUST .- To prevent mildew on roses, grapes, and gooseberries. Per lb., 15c; 5 lb. pkg., 50c.
- HELLEBORE. -- 1/4 lb., 15c; 1/2 lb., 20c; lb., 35c.
- KEROSENE EMULSION. An excellent spray for wooly aphis and clover mite.

Qt., 50c; 4 qts., \$1.25.

NICOTICIDE. - The best fumigator and spray for greenhouse work. Kills aphis, red spider, mealy bug, thrip, etc. **Pint can, \$2.50; qt., \$4.50; gal., \$15.00.** 

**POTASSIUM SULPHIDE**—(Liver of Sulphur). One of the best preventatives of mildew on roses and berry bushes. Dissolve  $\frac{1}{2}$  oz. in one gallon of hot water. When cold apply as a spray.

Price, 1 oz., 10c; 1-lb. can, 50c.

- PARIS GREEN-(Lion Brand) The standard of purity. Guaranteed superior to other makes. Price, ½ lb., 15c; ½ lb., 20c; lb., 35c; 2 lb., 65c.
- BLACK LEAF "40"-Latest and best tobacco spray. 1 lb. makes 170 gals. 1/2 lb. can 85c; 2 1/2 lbs. \$3.25; 10 1/2 lbs. \$12.50.
- QUASSIA CHIPS.— Generally used with Whale Oil Soap for plant lice, etc. Lb. 10c; 100 lbs. \$6.00
- WHALE OIL SOAP.—For aphis, plant lice, etc. 1 lb., 10c; 100 lbs., \$5.59.

SULPHUR, Powder.-

Lb., 5c; 100 lbs., market price.

TOBACCO STEMS.-Lb., 5c; per 100 lbs., \$2.50. **TOBACCO DUST.**-

Lb., 10c; 10 lbs., 75c; 100 lbs., \$5.75

## SPRAYOMETER

For testing lime and sulphur and other solutions. Registers from 0 to 35 Baume scale, and 1000 to 1300 specific gravity. A well made, reliable instrument that protects you against low grade sprays. Weight, 1 3/4 lbs. Price, each, 75c.

**PRAYOMETER SET** Consisting of one LI-SUL Sprayometer, one 12-inch plain Glass Cylinder in woolen container, with full instructions. Per Set—Weight ½ lb., **\$1.25.** SPRAYOMETER SET



## "CORONA" Arsenate of Lead

DRY POWDERED

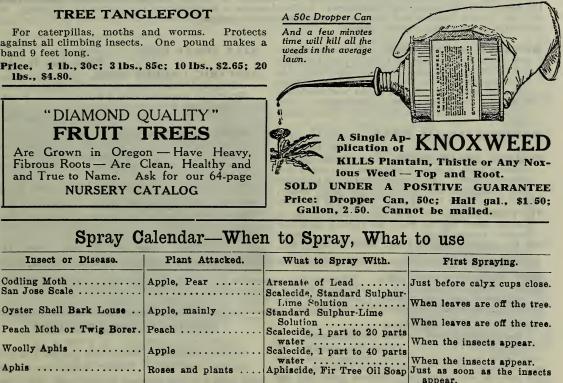
Mixes Quickly and Easily. Stays Mixed Longer and Sticks better to branches, leaves and fruit than Any Other Arsenate.

Contains only ARSENIC and LEAD OXIDES. NO FILLERS

NO SEDIMENT - NO LUMPS - NO WASTE - NEVER CLOGS NOZZLES

"CORONA" Dry Powdered Arsenate is a Light, Fluffy Powder that cannot freeze, dry out, cake or loose its strengtn—1s always uniform and requires only 1½ pounds to 50 gallons of water. Efficient, Economical and Convenient. Highest Percentage of Killing Power.

Full Information, Testimonials and Sworn Tests Mailed on Request PRICES: 1 lb. 40c; 5 lbs. \$1.75; 25 lbs. \$7.00; 50 lbs. \$13.50; 100 lbs. \$26.00; 200 lbs: \$50:00



Flant Attacked.	what to Spray with.	First Spraying.
Apple, Pear	Arsenate of Lead	Just before calyx cups close.
••••••••••••••••••	Scalecide, Standard Sulphur-	
Annle mainly	Lime Solution	when leaves are off the tree.
	1 Galutian	When los and the state
Peach	Serlegide 1 part to 20 parts	when leaves are on the tree.
	water	When the insects appear
Apple	Scalecide, 1 part to 40 parts	when the insects appear.
	water	When the insocts ennoor
Roses and plants	Aphiscide, Fir Tree Oil Soap	Just as soon as the insects
		appear.
Cabbage	Bug Death (non-poisonous).	Before the worms eat into
	and the second se	the cabhara
Cabbage	Scalecide, 1 part to 40 parts	a long and and a second second second
	water	When the insects appear.
Pear, Cherry, Peas	SHIP Shot or Bug Dooth	
Roses	Seplecide 1 part 4.	When the insects appear.
rear, currant	Water	When insects become cot-
Apple, Pear	Pordoone	tony (May).
Apple	Bordeaux double strongth	Just before blossoms open.
Peach	Standard Sulphur-Lime	immediately after leaves fall.
	Solution	Before hude hurst
Gooseberry	Potassium Sulphide, 1 ounce	
	to 2 gallons water	Just as buds burst.
ndard hop spray, use 1	lb. each. Quassia Chips and	Whale Oil Soan with 8 gal
	in out, quassia omps and	whate on soap with 8 gai
	Apple, Pear         Apple, mainly         Peach         Apple         Roses and plants         Cabbage         Cabbage         Pear, Cherry, Peas         Roses         Pear, Currant         Apple, Pear         Apple         Peach         Gooseberry	Apple, PearArsenate of LeadApple, mainlyScalecide, Standard Sulphur-Lime SolutionPeachScalecide, 1 part to 20 parts waterAppleScalecide, 1 part to 20 parts waterAppleScalecide, 1 part to 40 parts waterCabbageBug Death (non-poisonous).CabbageScalecide, 1 part to 40 parts waterPear, Cherry, PeasSlug Shot, or Bug Death Thrip Juice, or Aphiscide Scalecide, 1 part to 40 parts waterApple, PearBordeaux AppleAppleScalecide, 1 part to 40 parts waterPeachScalecide, 1 part to 40 parts waterPear, Cherry, PeasSlug Shot, or Bug Death Standard Sulphur-Lime Bordeaux AppleApple, PearBordeaux Standard Sulphur-Lime SolutionGooseberryPotassium Sulphide, 1 ounce to 2 gallons waterndard hop spray, use 1Ib. each, Quassia Chips and

Gould Spray Pumps WILL GIVE AND MAINTAIN THE NECESSARY PRESSURE TO SPRAY RIGHT. They are built for lasting service. See Page 118

SPRAYING to be	effective	MUST	BE	WELL	DONE -
"How to Spray — When to Spray	y — What Spra	yer to Use''	is a va	luable and i	nteresting book
that tells all about sprays and spraye	rs. We will m	all this boo	k to y	ou free on	request.



#### For Spray Pumps and Gardens.

THIS season we are offering our customers a very complete and reliable line of spray and garden hose. We buy in very large quantities, direct from the manufacturers, which places us in a position to quote the following very low prices. Most of the brands we offer are manufactured especially for us, and can be obtained nowhere else.

- All our hose, excepting spray, is furnished in 50-foot lengths, and comes coupled ready NOTE .for use. We will cut any of these hose in 25-foot lengths at an additional cost of 25c for couplings. We will cut <sup>1</sup>/<sub>2</sub>-inch Pomona and Monarch Spray Hose in any length desired, at an extra cost of 65c for spray couplings in less than 50-foot lengths.

MONARCH SPRAY HOSE .- The Monarch, a new spray hose, is even a better grade than our well-known "Pomona." It is absolutely the best hose we can buy; the rubber is of exceptionally good quality and is very heavy; and we do not hesitate to recommend it to orchardmen, who must have a very high-grade and strong spray hose.

MONARCH SPECIAL SPRAY .- 1/2-inch only Per ft., 18c.

POMONA SPRAY HOSE. - Our well known Pomona is the best hose which can be bought at a moderate price. It has stood the test of time and hard usage, and has always proved good. 5-ply.

Price, ½-in., per ft., 13 ½c; ¾-in., per ft., 15c. SUCTION HOSE .- This is an excellent grade of suction hose, and is what we furnish with our regular pump outfit. Price; per ft., ¾-in., 27 ½c; 1-in., 30c; 1 ¼-in., 35c.

AJAX SPRAY HOSE .- 3/8-inch only.

Price, per ft., 10c.

Price, \$1.50.

**ELECTRIC GARDEN HOSE.**-- A new process, corrugated rubber hose, that will not kink or break. Especially recommended for florists and gardeners who use hose continuously.

Price, per ft., ½-in., 21c; ¾-in., 25c.

"HOOD" GARDEN HOSE. --- This is an excellent grade of garden hose. It is made with four heavy plies of canvas, and with good, thick inside tubing. We have no hesitancy in recommending this for ordinary garden use.

Price, ½-in., per ft., 10c; ¾-in., 12 ½c.

ST. HELENS GARDEN HOSE .- This is a good grade of garden hose of moderate price, and where a hose of medium price is wanted it will give excellent satisfaction.

Price, ½-in., per ft., 9c; ¾-in., 11c.

\* FLORISTS' SUPPLIES.— We carry a complete line of high grade, up-to-date supplies. Write or You can depend upon us for prompt service at right prices. Descriptive price list on request. wire. Designs and cut flowers furnished on short notice.

## Mastica

For Glazing New or Old Greenhouses. The use of "Mastica" avoids the necessity of repeatedly reglazing the houses, saving much time and expense. With "Mastica" you can bed in, or use outside with machine. Broken glass can be easily removed and replaced by new without breakage of other glass, which usually occurs with hard One gallon will cover about 290 running putty. Price, per gallon, \$1.50. feet (one side).

To fill the machine, remove the plunger and pour "Mastica" into top of cylinder; replace the plunger and with a gentle pressure of the handle the "Mastica" is forced through the opening at the heel, and is smoothed into perfect condition by the foot pass-

**Mastica Glazing Machine** 

## **Putty Bulbs**

convenient Very for applying liquid glazing in putty greenhouses. (see Price. \$1.00. cut.)

#### Points

Peerless. Best made. point No when raising up rights, driven — no no lefts, no sliding, no trouble to apply; cheap, indestructible. Once used always used. (See cut) 1000 in box. Price, 75c.



ing over it. (See cut.)

**Strong, Healthy Trees and Plants** 

We have them in quantity Our tree catalog tells all.



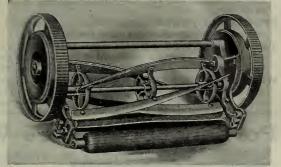
## **Highest Grade**

## Cycle Lawn Mowers.

**Fully Guaranteed** 

Stationary, draw-cut blade, self sharpening, protected from rocks, nails, etc., keeps the mower close to the turf on uneven ground — cuts all the grass right the first time over.

CYCLEMOWERS - Have self-adjusting ball bear ings, bed knife rests on frame instead of being supported by screws — as in other models making it impossible to bend or warp out of alignment, the revolving wiper blades draw the grass over the keen cutting edge of the bed knife. This is the big distinctive feature of the Cycle-mower and is entirely different from other lawn mowers. The bed knife is protected, has lipped cutting edge, does not wear unevenly and is self sharpening and adjusting. We tried them out for a season on our own grounds before offering to our customers and found them superior in every respect. If you would be free from lawn mower troubles, buy the light running self sharpening Cyclemower.



"Cyclemowers" are made of Crucible Steel

PRICES AND SIZES.

14 in. cut,	8 in. wheel, 4 blades	5.65	16 in. cut, 10 in. wheel, 4 blades 7.83	5
16 in. cut,	8 in. wheel, 4 blades	5.95	18 in. cut, 10 in. wheel, 4 blades 8.33	5
			14 in. cut, 11 in. wheel, 5 blades 9.75	
			16 in. cut, 11 in. wheel, 5 blades 10.90	
14 in. cut, 1	10 in. wheel, 4 blades	7.50	18 in. cut, 11 in. wheel, 5 blades 12.00	0



## **RAFFIA AND REEDS**

#### FOR BASKET MAKING.

Raffia weaving has become very popular. Baskets, jewel boxes, shopping bags, mats, cushions, slippers and hats are but a part of the many useful articles woven.

- RAFFIA .- Any shade, the popular colors being red, green, yellow, orange, brown, black, blue and purple.
- Prices, Natural color, 1/4 lb., 10c; postpaid, 15c per lb., 25c.
- colored RAFFIA-Per pkg., 10c; postpd, 12c; Per lb. 60c.
- REEDS. In the weaving of the larger baskets Reeds are used as a frame or foundation, making them firmer and heavier. We have these in five sizes.
- Prices: No. 1, small, per lb., \$1.35; No. 2, \$1.20 No. 3, \$1.05; No. 4, 90c; No. 5, largest, size 80c.
- All sizes are put up in convenient packaes of 10c, 15c and 20c each. If wanted by mail add 3c.

SAMPLES showing colors of Raffia and sizes of Reeds sent for 2c to cover postage

BASKET MAKING Tells how to use Raffia and Reeds. 25c postpaid



$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$250 \\ 300 \\ 450$	\$17.50 18.50 27.50
--	---------------------	---------------------------

One and Two Section "Water-Weight" Rollers These can be filled with water or sand, and when empty are easily transported, adjusting the weight to suit.

Sec.	Empty	Water	Sand	
1	75	300	500	13.00
	125	500	800	17.50
	100	300	500	19.00
2	170	650	1000	25.00
2	145	500	800	22.00
	$\begin{array}{c} 1 \\ 1 \\ 2 \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

### "DIAMOND" Fancy Recleaned **GRASS SEEDS**

Special mixtures for very wet land, terraces, shady places, tennis courts, golf links. Write us. We can save you money and help you to secure the best possible results from your plantings.

## "DIAMOND QUALITY" BEE SUPPLIES FOR WESTERN BEE KEEPERS

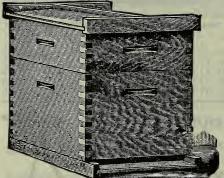
WE ARE THE PIONEERS in the Bee Supply business in the Northwest, are thoroughly familiar with local conditions and requirements and if you are new to the business or the country we can be of much help in saving you any unnecessary outlay, work or loss of time and can start you on the right road to success

**STOCKS ARE LARGE** and complete and we can fill any size order on short notice and will give the small order just as careful attention as the larger one.

THE A. I. ROOT CO'S HIVES AND SUPPLIES well-known the world over as the standard of excellence are always on hand for prompt delivery at lower prices than you can purchase them for direct as we are agents for the Root Company and give our customers the advantage of car rates.

**WESTERN PINE AND CEDAR HIVES** made to our order in standard sizes and designs; of first clas<sup>s</sup> material and workmanship, are very popular with local bee keepers. Our Western lumber is satisfactory and lasting and we recommend them as being economical and serviceable.

## Portland Seed Co.'s Western Cedar Hives



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These cedar hives are made especially for our Western trade. In construction they are the same as our pine hives, the only difference being that they are made of a superior quality of cedar, the best and most lasting wood for our Western climate. The sections and separators used in the supers are the regular No. 1 Eastern stock. Price and quality considered, these hives are splendid bargains.

PRICES.	Each Nailed		Packed.W	
No. 1-8		\$10.00	\$19.00	275
No. 2-8	. 1.95	9.00	17.00	250
No. 1-10	2.35	11.00	21.00	270
No. 2-10	. 2.15	10.00	19.00	252
No. 10-8	2.50	11.35	21.50	300
For description of num	bers, see t	those give	en for our	pine

For description of numbers, see those given for our pine hives at bottom of page.

## P. S. Co.'s Dovetailed Western Pine Hives

This is our lowest priced hive and is the best value we can offer. It is standard size and well and carefully made of first-class lumber. The inside fixtures are just the same as in our regular pine hives, and the sections supplied are of the best grade of white Eastern basswood. For general description of the different numbers see corresponding numbers and descriptions under Eastern Pine Hives, bottom of page.

	Each I	K. D. I	Packed. W	leight.		Each	K. D. 3	Packed. V	Weight
	Naile	d 5	10	of 10		Nailed	5	10	of 10
N0. 1-8	. \$2.00	\$9.25	\$17.50	280	No. 2-8	. \$1.80	\$8.25	\$15.50	265
No. 1-8, less Super	1.40	6.45	12.25	205	No. 2-8, less Super	1.35	6.10	11.75	195

## P.S. Co.'s Dovetailed Eastern Pine Hives

### **Descriptions and Prices**

Order by Number. Five Hives at Same Rate as Ten.

No. 1. Dovetailed Hive.—(Complete with 1 super) consists of 1 bottom board, 1 body, 1 super, 1 cover, 8 H offman brood frames, 1 division board, 2 tightening springs for super, 6 section holders, 6 slotted separators, 24 sections and foundation starters for frames and sections and nails.

Nailed, \$2.55 each; per 10 K. D. flat, \$23.00. No. 2. Dovetailed Hive is the same as No. 1, less sections and foundation starters.

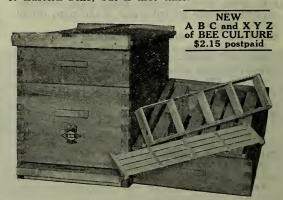
Nailed, \$2.35 each; per 10, K. D. flat, \$20.50. No. 3. Dovetailed Hive is the same as No. 1, except it has two supers instead of one.

Nailed, \$3.40 each; per 10, K. D. flat, \$30.50. No. 4. Dovetailed Hive is the same as No. 3, less sections and foundation starters.

Nailed, \$3.05 each; per 10 K. D. flat, \$26.59. No. 10. Dovetailed Hive (complete two-story for extracting), consists of one bottom board, 2 bodies, 1 cover, 16 Hoffman brood frames, 2 division boards and nails.

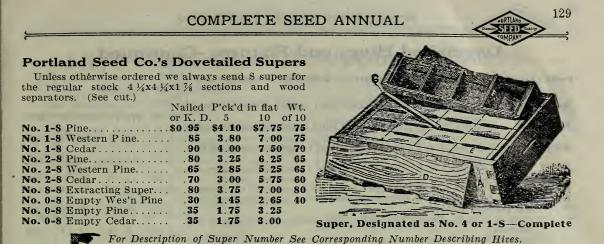
Nailed, \$2.80 each; per 10 K. D. flat, \$24.50.

This hive is similar to the Root Dovetailed Hive, except that it is made from a little different kind of Eastern Pine, but is first class.



AE64S-8 Hive for 41/4-41/4-17/8 Sections

We advise the use of the above combinations, but if you want sections or separators of other designs. Make note in your order.



## Root's Hive Combinations and How to Understand Them

To accommodate various localities and bee keepers of different preferences, we have a large number of different combinations, and each combination is indicated by a series of letters and figures. A glance at the following table showing the meaning of each letter or figure in alphabetical and numerical order will make all plain.

- Danzenbaker bottom.
- E. Excelsior cover.
- The gable cover. G.
- I. Super for Ideal plain sections, 35/8 x5.
- M. Super 4x5 plain sections for the Danz, hive.
- Super equipped for plain 4 1/4 sections. **P**.
- Rc. Metal roof, double cover.
- Super for 4 1/4 beeway sections. S.

Super with section holders, separators of 2. fences, but no sections or foundation.

Super with section holders, separators or 4. fences, sections and foundation starters.

5. Hive body or brood chamber, with frames and division board but no starters.

Hive body or brood chamber with frames, division board, and foundation starters.

Complete Hive Body with full sheets of 7. foundation, without cover or bottom. 8. Indicates hive with 8 brood frames.

10. Indicates hive with ten brood frames.

When the figures are doubled, it indicates that two of the articles are called for. For instance, 2-2P means two supers with plain section holders and fences.

If you desire a Danz. bottom-board, E.celsior cover, 8-frame dovetailed hive with frames, foundation and super with section holders, 4 1/4 plain sections, fences and foundations, the number would stand thus: AE64P-8.

If you wish two supers, in place of the one you would add another figure 4, and the whole would read for 8-frame hive; or if you wanted this same combination without foundation or sections, the designation would be AE522P-8.

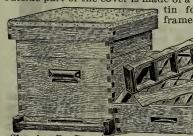
## Improved Appliances of the A. I. Root Co.

**DANZENBAKER HIVES.**— These hives take the same Cover, Bottom Board and Super as the ten-frame dovetailed hive, but the Brood Chamber is more shallow, taking ten closed end Brood Frames 7 1/2 inches deep and 17 inches long; each is supported by a pivot in the center of the end bars, a great improvement, as the frames can be reversed and filled out to the ends; it also prevents bees mashing in handling.

The Section Holder has the same kind of Pivot Support, and a fence separator is used. The Section is a plain 4x5x1%, a size and shape that is very pleasing to the eye, and therefore a good seller. The arrangement in the super is such as to get perfect results in filling out the sections, and in no other hive are they so uniformly and attractively finished. While the Danz. Hive is more shallow than the standard Langstroth it has exactly the same Cubic Capacity as the eight-frame Dovetailed Hive. For prices see page 130.

#### Metal Roofed Double Cover-Rc.

Consists of a  $\frac{3}{4}$  inch super cover, tin-bound, that should be supported a full bee-space above the sections; this is designated as **c**. The outside part of the cover is made of a solid sheet of lead coated roofing

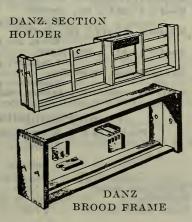


Showing Rc Cover

tin folded at the corners around a frame that telescopes over the top of the hive making a weather proof cover that will not blow off, warp or leak. This top is the R part of the combination cover listed and sold

complete as Rc. Add 25c Der when hive Rc cover is ordered





PORTLAND SEED COMPANY'S

## **Dovetailed Hives and Fixtures-Continued**

				-
Price List of Root's Dovetailed Pine Hives—Different Combinations	Each Nail-	K. D.	in Flat	Wgt. of 10
HIVES	ed	5	10	01 10
No. 1 (A-E or A-G, 6-4, S or P) 8 frame body and 1 super, all complete with		J	10	
starters	\$2.80	\$12.75	\$25.00	280
No. 1 (A-E or A-G, 6-4, S or P) 10 frame body and 1 super, all complete with		<b><i>wi20</i></b>	\$20.00	200
starters	2.95	13.50	26.50	320
No. 2 (A-E or A-G, 5-2, S or P) 8 frame body and 1 super, all complete less		10100		1
section and starters.	2.50	11.25	22.00	260
No. 2 (A-E or A-G, 5-2, S or P) 10 frame body and 1 super, all complete less		1		-
sections and starters	2.65	12.00	23.50	300
No. 3 (A-E or A-G, 6-4-4, S or P) 8 frame body and 2 supers, all complete	3.70	16.75	33.00	350
No. 4 (A-E or A-G, 5-2-2, S or P) 8 frame body and 2 supers, all complete,				
less sections and starters		14.25	28.00	320
(A-E or A-G, 6,) 8 frame body only, with frames, division board and			•	10.00
starters		9.15	17.75	195
(A-E or A-G, 5,) 8 frame body only, with frames, division board and				100
no starters	1.95	0	17.00	190
No. 10 (A-E or A-G, 5-5) 8 frame body, two story	2.90	13.00	25.50	320
HIVE BOTTOM. A-Danzenbaker bottom-8	40	1 05	3.50	10
HIVE COVERS.	40	1.85	5.50	40
E-Excelsior or G-gable cover-8	.50	2.25	4.25	40
HIVE BODIES (Brood Chamber).		2.20	1.20	10
Empty body for 8 frames 9 ½ inches deep with tin rabbets	.75	3.50	6.60	80
5-body-8, with frames and division board.			9.75	130
6-body-8, with frames, division board and starters	1.15	5.25	10.15	135
SUPERS				1
No. 1 (4 P, S or I) 8, all complete with starters and Sections	1.00	4.50	8.60	75
No. 1 (4 P, S or I) 10, all complete with starters and Sections.		4.75	9.10	100
No. 2 (2 P, S or I) 8, all complete, less starters and Sections			7.00	65
No. 2 (2 P, S or I) 10, all complete, less starters and Sections			7.50	80
No. 0 Plain supers, witS flat tin; empty	.45	2.00	3.75	40
DANZENBAKER HIVES				000
$A \equiv D, 6-4 M-10$			30.00	330
$A_Rc D 6-4 M-10$			32.00	300
A E D, 5-2 M-10 A Rc D, 5-2 M-10			27.00 29.00	300
A E D, 5-10			17.50	200
SUPERS.	2.05	9.00	17.50	200
Danz. 4 M-10 super	1.35	6.25	12.00	120
Danz. 2 M-10 super			10.50	100
Note.— D. Danzenbaker cover, M. Danzenbaker super.				

## **Hive Fixtures and Miscellaneous Bee Supplies**

**Section Honey Boxes** 

No 1 Sections are made of the choicest white basswood, are perfect in finish and free from defects.



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No. 1. Root's Best White. Per 100, 75c; 500, \$3.25; 1,000, \$6.25 Portland Seed Co.'s No. 1. Per 100, 70c; 500, \$3.00; 1,000, \$5.75.

No. 2. Root's Second Grade.

Per 100, 70c; 500, \$3.00; 1,000, \$5.75. Portland Seed Co.'s No. 2. Per 1,000, \$5.25.

Weight, 12 ½ lbs. per 100. For postal rate see inside front cover.

Order any of the following sizes wanted. We have  $4\frac{1}{4}x4\frac{1}{4}x1\frac{1}{6}$ , generally used and always sent unless otherwise ordered;  $4\frac{1}{4}x4\frac{1}{4}x7$  to the foot;  $4\frac{1}{4}x4\frac{1}{4}x1$  15-16;  $4\frac{1}{4}x4\frac{1}{4}x1\frac{1}{4}$ . The  $4\frac{1}{4}x4\frac{1}{4}x1\frac{1}{6}$ ,  $3\frac{5}{6}x531\frac{1}{6}$ , and  $4x5x1\frac{3}{6}$  Danzenbaker, having no bee way, are 25c per 1000 less.

Section HoldersComplete weigh 251/2 lbs. per 100	FRAMES
Root's 1 1/8x18 1/8 in., slotted.	Weight per 100, 40 lbs.
Each, 3c; per 100, \$2.75. Western, 1 1/2x18 1/8 in., slotted. Each, 3c; per 100, \$2.20. Root's 1 1/2x17 1/2 in., plain. Each, 3c; per 100, \$2.40. Danzenbaker, reversible. Each, 4c; per 100, \$3.00. Bottoms only - 1 1/2 inches wide, slotted or	NEW METAL SPACED HOFFMAN FRAME Recommended where there is much
plain. Wt. 1 lb. per 10. Each, 2c; per 100, \$1.50.	propolis. Spacing accurate and frames
Comb Foundation	handle easily.
Packed in 1, 2, 3, and 5-lb. boxes.	Price, per 10, 50c; per 100, \$4.25.
Size of No. In Lots of	Improved Hoffman Frames
GRADE         per           Light Standard Brood         7 ¾x61 ⅛           Extra Light Brood         7 ¾x61 ⅛           Light Section         3 ¼x15 ½           28.70         .68           Light Section         3 ¼x15 ½           28.70         .69           Extra Light Section         3 ¼x15 ½           29.75         .74	Weight per 100, 37 ½ lbs. Improved F. F. Root's Per 10, 40c; 100, \$3.50 Improved F. F. P. S. Co. Per 10, 35c; 100, 3.25 Western



## Hive Fixtures and Supplies-Continued

#### **Honey Extractors**

Ball bearings and slip gear devices are furnished on all of our Extractors.

THE NEW ROOT AUTOMATIC EXTRAC-TOR. Fitted with a brake that reverses the frames instantly without jar or injury and without stopping. This is an exclusive feature of the Root Automatic. Weight 210 lbs. We furnish the 4 frame size. Price, \$32.50.

#### No. 5, NOVICE.

Two frame for any size frame not over 9 1/2 by 18 1/2 inches; weight, 45 pounds.

Price, \$13.25. No. 15, COWAN REVERSIBLE.

Price, \$16.25 Two Frame. Weight, 85 lbs.

#### Separators

Slotted Wood, 4 ½x18, Eastern. Wt. 8 lbs., per 100. Per 10, 15c; per 100, \$1.10.

Slotted Wood, P. S. Co.'s. Wt. 8 lbs. per 100. Per 10, 15c; per 100, \$1.00. Western (Veneer). 8 lbs. per C. Per 100, 75c. Plain separators. 8 lbs. per C. 10, 15c; 100, \$1.00

Fence, P. or I. 13 lbs. per C. 10, 30c; 100, \$2.25 Fence, Danzenbaker, M. Weight, 16 lbs. per 100. Per 10, 30c; 100, \$2.30.

#### Smokers (See cut.)

Every owner of a hive of bees should have a smoker. A few blasts of smoke will quidt the bees so that they can be handled with safety. (See cut of the leading kinds.)

Clark's Cold Blast. Probably the most popular smoker in use today. Weight 1 ½ lbs. **Price, 70c.** in use today.

#### **Improved Corneil.**

Makes a good strong blast. The most satisfactory and servicable smokers.

Standard size, 3 ¼-inch, weight 2 lbs., \$1.00. Standard Jumbo, 4-inch, weight 2 lbs, Standard Copper, 3 ½-inch, weight 2 lbs, \$1.50. \$1.75 Junior, 2 ½-inch, weight, 1 ¼ lbs., 80c.

Danz, Victor. Combined hot and cold blast. Weight 1 3/4 lbs. Price, \$1.10.

#### **Bingham Smokers**

The "Conqueror" and Strong, well made. "Doctor" not excelled for use in large apiaries. Bingham Conqueror. We Bingham Little Wonder. Weight 1 lb....60c. Weight 1 1/2 lbs..... 1.15. Bingham Doctor. Bingham Large. Bingham Engine.

#### Feeders

Gray's. This is designed to be placed tight up gainst the entrance. Price, 20c; by mail, 30c. against the entrance.

Alexander. Latest out. Used under rear end brood chamber. Weight 1 ½ lbs. Price, 30c. Simplicity. Weight 6 ozs.

Each, 10c; by mail, 15c. Miller's. Sets on hive like a super; holds about 25 pounds of syrup. Weight 5 lbs, K. D.

Nailed up complete, 40c; in flat, 35c. Boardman's.

Weight ½ lb. Price, 25c; without jar, 20c.

Division Board Feeders. Weight 1 1/4 lbs. Each, nailed, 30c.

#### **Foundation Fasteners**

Parker's. Well worth the price.

Price, 40c; by mail, 50c. astener. Will put start-**Daisy Foundation Fastener.** ers in better and faster than any machine before in-

troduced. Weight, 5 ½ lbs.' Price, without lamp, \$1.15; with lamp, \$1.40. Van Deusen Wax Tube Fastener.

Price, 20c; by mail, 25c. Wire Imbedders

The Easterday. Weight 4 ozs.

#### Price, 20c; by mail, 25c.

Spur Wire Imbedder. Teeth set so as to straddle the wire while imbedding it. Weight, 4 ozs. Price, 20c; by mail, 23c.

#### Wax Extractors

Doolittle Solar Wax Extractor. With this the sun supplies the heat; weight 30 pounds.

Price, \$5.25. Price, \$13.00 **Root's German Wax Extractor.** Hatch Wax Press. Price, \$7, 50,

Swiss Wax Extractor. Comb is put in wire basket inside of can and set over hot water. Simple and good. Price, \$4.00; with steam generator, \$5.00

#### Porter Honey House Escape

No extracting room is complete without one or ore of them. Each, 25c; postpaid. more of them.



#### **Bee Entrance Guards**

Root's or Tinker's. These are to admit workers, Weight 1/4 lb. but exclude drones.

Price, 15c; by mail, 20c. Improved Wire Front, Price, 20c; by mail, 25c.

### Alley's Drone and Queen Trap

A non-swarming device. Weight 1 lb.

**Improved Wire Front.** 

Each, 55c. Each, 60c.

#### **Hive Parts**

Each, 10c; 10 for 90c. Division boards. Each, 5c; 10 for 35c. Followers Each, 1c; 10 for 8c. Tightening Spring.

Honey Shipping Cases

Non-Drip

12-lb. Shipping Cases, Root's.

Nailed, each, 20c; flat, 10, \$1.70. 24-lb. Shipping Cases, Root's Nailed, each, 30c; flat, 10, \$2.50.

24-1b. for 3 5-8x5 sections, Root's. Nailed, each, 30c; flat, 10, \$2.35.

32-1b. for 1 1/2 inch sections.

Nailed, each, 30c; flat, 10, \$2.50. 24-1b. for Danzebaker sections.

Nailed, each, 30c; flat, 10, \$2.35.

#### Porter Bee Escape

Great Labor-saver. Weight 2 ozs. Price, 20c, postpaid. Mounted. Weight 2 1/4 lbs., Each, 40c. PORTLAND SEED COMPANY'S

## **Hive Fixtures and Supplies**—Continued



**Bee Brushes** 

Coggshall's. (See cut). Price, 20c; by mail, 25c Dixie. (See cut). Price, 20c; by mail, 25c **Gloves**, Rubber

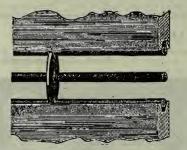
Ladies. Sizes 7. 8, 9. Price, \$1.25; by mail, \$1.35. Men's. Sizes 10, 11, 12. Price, \$1.50; by mail \$1.60 Men's Half Long. Sizes 13, 14, 15. Price, \$1.75, by mail, \$1.85.

Long Heavy Canvas. Price, 60c; by mail, 70c. Note.—To insure getting proper size, mark outline of hand on sheet of paper.\_\_\_\_\_

#### **Honey Boards**

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Used to confine the queen to the brood chamber. Nos. 1 and 11 are unbound zinc. Nos. 12 and 13 are wood-bound with a bee space one side.



NEW STYLE WOOD AND WIRE HONEY BOARD

No sharp edges for the bees to pass over.

11. 8-frame, unbound, 12x19 1/2 inches. One, 25c; ten, \$2.00. No. 1. 10-frame, unbound, 14x19 ½ inches. One, 25c; ten, \$2.10. No. 13. 8-frame, wood-bound, 13 ½x20 inches. One, 30c; ten, \$2.50. No. 12. 10-frame, wood-bound, 16x20 inches. One, 30c; ten, \$2.75. No. 8. 8-frame, wood and wire, 13 ½x20 inches. One, 40c; ten, \$3.75. No. 7. 10-frame, wood and wire, 16x20 inches. One, 45c; ten, \$4.00.

#### **Perforated Zinc**

Used for making honey boards, also entrance guards, queen and drone traps, etc.

Perforated sheets, each, 32x96, \$2.00. Less than a sheet, per square foot, 15c. Manum's Swarming Device

A most complete swarming device. The swarmer is light, conveniently carried, and will reach a swarm 20 feet from the ground. **Complete, \$1.75** wire basket, with bail, no pole, \$1.35.

### **Miscellaneous Bee Supplies**

Queen Cell Protector. Doolittle. Each, 3c; by mail, 5c. West's Cell Protector.

Each, 8c; 10 for 65c; by mail, 75c. West's Spiral Cage

Each, 10c; 10 for 80c; by mail, 90c.

Hive Clamps, per pair, 5c; 10 pairs, 40c. without screws, 10 pairs, 35c. Add 3c per pair postage.

<b>Hill's Device.</b> For covering fra	mes in winter.
Each, 10c; 10 for 75c;	postpaid, \$1.00.
Hubbard Section Press.	Price, \$2.85.
Root's Section Press.	Price, \$2.00.
Hive Tent, weight 6 lbs.	Price, \$3.00.

Novice. Quinby. Bingham. Honey Knife.

Honey Knives Price, 85c; by mail, 95c. Price, \$1.00; by mail, \$1.10 Price, 80c; by mail, 90c. Broad square blade.

Price, 15c; by mail, 20c.

**Cages for Queens** 

Benton. For mailing and introducing. Each, no candy, 5c; by mail, 7c; with candy, each, 10c. by mail.

#### **Root's Queen Rearing Outfit**

A complete set of tools and materials, including book of instructions, enabling any one with very little experience to rear his own queens at small expense. Price, \$4.75.

#### Queen Bees and Colonies

We are in a position to furnish full-blooded Italian queens, and full colonies. It takes about five days to get these in from the apiary, so do not expect queens by return mail.

> Untested Queen. April, \$1.75; May, June, July, August, September, \$1.25.

Tested Queen. April, May, June July, August, September, \$2.00.

Selected Tested Queen. April, \$3.50; May, June or July, \$2.50; August or September, \$3.00.

Full Colony. In an 8-frame hive. Price, \$8.00.

#### **Bee Veils**

Has five bars that will keep veil away Globe. Weight, 6 oz. from head.

Price, \$1.00; postpaid, \$1.10. These veils have a rubber band Hat Veils. round the top, so as to fit the hat snugly.

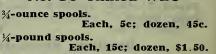
No. 1 Veil, made entirely of silk tulle.

90c., postpaid. No. 2 Veil, cotton tulle, silk face.

65c., postpaid. No. 3 Veil, cotton tulle throughout. 50c., postpaid.

80c., postpaid.

#### No. 30 Tinned Wire



1/4-pound spools.

1/2-pound spools.

Each, 25c; dozen, \$2.25.

5-pound coils.

Each, \$1.35.

Alexander.

	TI	N RABBETS
Price:	12-inch	Per 10, 15c; per 100, \$1.40.
	14-inch	Per 10, 15c; per 100, \$1.40.
	15-inch	Per 10, 20c; per 100, \$1.55.
		T-TINS
Price:	12-inch	Per 10, 15c; per 100, \$1.40.
		Per 10, 15c; per 100, \$1.40.
	14-inch	Per 10, 15c; per 100, \$1.40.
		Per 10, 20c; per 100, \$1.55.
/	18 to 20-inc	h Per 10, 25c; per 100, \$2.00.
	F	LAT TINS
Price:	12-inch	Per 10, 10c; per 100, 60c.
	13 ½-inch.	Per 10, 10c; per 100, 60c.
	14-inch	Per 10, 10c; per 100, 60c.
	15-inch	Per 10, 10c; per 100, 75c.

Books for Bee Keepers. See Book List, pages 60 and 61.

## The Sharples Cream Separator

For 33 years the standard. More Sharples Separators are in use today than all others combined.

F you milk a few cows you need a separator. If you milk many cows and do not use a separator, you are losing many times its cost.

The first cost of a Sharples Separator is not great and it quickly pays for itself in the finer separation of butter fat, saving much that is lost by hand skimming; also saves labor and trouble; no pans to set around, skim and care for; you simply pour the milk into the low receiver and a few turns will separate every particle of cream that can be saved. If there is a single doubt in your mind as to which separa-

tor is the best for you to buy, compare the many intricate contrivances that make up the working parts of other separators with the few simple, smooth parts of the matchless "Tubular A."

21/8 lbs. 81/4 lbs. 10/8 lbs. 61/4 lbs. 3/4 lbs. 1/8 lbs.

E

ō

lbs. per hour....\$ 80.00

Turbine 700 lbs. per hour..... 100.00

-Turbine 1000 lbs. per hour..... 125.00

õ

W

CKE

BOW

12% lbs.

CKE

BOW

Turbine 500

No.

No. 10C K E

BOW.



- compare the three san-See illustration. itary parts of the Tubular to the multitude of germ and dirt collectors of the others. No other argument is necessary to convince any observing person of the superior merits of the Sharples.

What others attempt by complicated mechanical devises, the Sharples thoroughly and easily accomplishes with twice their skimming force by a process that is simple, powerful, irresistible in the perfection and beauty of its mechanical detail. If your local dealer does not handle Sharples

06 Separators, we will send the Sharples books to you on receipt of your address. They contain com-plete description, tell all about Tubular and Jersey separa-tors, and contain much other interesting matter. We will tors, and contain much other interesting matter. be pleased to answer inquiries or demonstrate the Sharples in our store. There are nine sizes.

All prices are F. O. B. Portland, safely packed No. 3-Tubular 400 lbs. per hour..... 65.00 No. 4—Tubular 500 lbs. per hour...... 75.00 No. 6—Tubular 700 lbs. per hour...... 90.00 No. 9-Tubular 950 lbs. per hour..... 110.00

## JERSEY—An Improved Type of Disc Machine for Those Who Prefer a Low Priced Separator

If a cheaper separator than a "Tubular" will answer your purpose, investigate the "Jersey," which skims cleaner, runs easier, is simpler and lasts longer than anyother separator — with the single ex-ception of the "Tubular." Has bottom feed and single suspended bearing. The "Jersey" is guaranteed superior to any other separator of its class "JERSEY" No. 5—500 lbs. per hour, \$45.00. No. 9—900 lbs. per hour, \$75.00.F. O. B. Portland

## Babcock Tester – Model 8

#### For Testing Milk and Its Products.

The most accurate and best built tester. Case is one solid piece, weighing about 4 pounds. Crank and shaft a single solid piece of steel. Worm spindle and gear solid steel and iron mesh full width. Buckets solid brass. Gear worm runs in oil. Model 8 Babcock Testers are guaranteed perfect in workmanship and material, all are equipped with full set of glzssware, bottle of acid and brush. Shipping weight, 15 lbs. Accurate skim milk bottles at 60c each; \$6.00 dozen; postage 10c for single bottle.

No. 4 — 2 No. 5 — 2 No. 6 — 4 No. 7 — 4	bottles, bottles, bottles,	milk milk milk	only and only	cream .		4.75
"TIPS FO	<b>DR BUT</b>	TERN	MAH	ERS" i	s'a sple	endid
	which w	e send	I FR	EE ON	REQU	EST

**Dairy Thermometers and Glassware** Floating Glass Dairy Thermometers, 8 inches, flat scale, easy to read, floats upright, range 150 Each, 25c. degrees.

#### LACTOMETER.

(Milk Per cent scale, New York Board of Health Pattern.) 0 to 20; 2 degrees graduation. Each, 50c. LACTODENSIMETER (Quevenne)

## Specific gravity scale, 1015 to 1040, 1 degree

Each, 50c. graduations. LACTODENSIMETER (Quevenne)

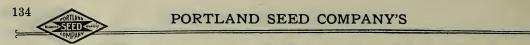
Specific gravity scale, 1015 to 1040, 1 degree graduations; with thermometer in top of stem, Each, \$2.00. length, 13 inches.

#### GLASS JARS. Plain glass jars with foot and pour-out for use with sprayometers and hygrometers in testing.

	GRA	DUA	TED	CREAM	GAUGE.	
12x2	inches				Each,	50c.
					Each,	

Graduated 0 to 30 per cent. 9 1/2x1 1/2 inches. 75c

TPNOTE – All glassware carefully packed for mailing, but we will not be responsible for breakage in transit.



"MANDY LEE" Incubators for 1914

Heat QuicklyRun EvenlyRegulate AutomaticallyTHEY DO NOT DEPEND UPON YOUR SKILL OR EXPERIENCEYOU SIMPLY FOLLOW INSTRUCTIONS — Your success is sure if the eggs are good



The "Mandy Lee" is built to automatically meet these requirements; no other incubator can give as good results.

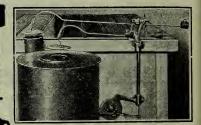
#### **FRESH OXYGEN**

Life giving oxygen is freely supplied at the egg level **when the chicks are coming out**, without losing the moisture or lowering the temperature.

#### EGG LEVEL VENTILATION

The new "Mandy Lee" has large ventilators in the lower part of the door, these openings are covered with finely woven brass wire cloth; through these ventilators fresh oxygen is constantly being supplied and the carbonic acid gas passing out. This diffusion of gases has no perceptible effect on the heat or moisture, but insures the chicks against suffocation at a time when the machine cannot be opened. The only perfect method of ventilation—no draft. No other incubator gives this important advantage.

EGG TRAY has a combined wire and slat bottom, and can be used either way. Large machines are furnished with sectional trays and one extra tray for turning. This enables you to turn the eggs quickly and to change trays to any position in the egg chamber.



Thenew Automatic Regulator for Heat, Moisture and Ventilation. Direct ventilation of egg chamber if heat goes too high. Be sure to write for the LEE BOOK-LETS—FREE on REQUEST.

FOR HATCHING DUCKS The "Mandy Lee" will give you better results than any other incubator—because of the perfect control and automatic regulation.





#### MANDY LEE HYGROMETER

Accurately registers the moisture, is easily read, makes possible a sure hatch of vigorous chicks. Free with every incubator. Sold alone, \$2.50, postpaid

**NEW MOISTURE PAN** can be removed or refilled without opening incubator.

**DROP NURSERY BOTTOM** permitting removal of chicks without opening incubator.

**NURSERY TRAY** has a cloth bottom that can be turned up until the eighteenth day, thus cutting off the air space beneath the eggs.

Special adjustment of egg tray, thermometer and nursery, making the "Mandy Lee" Incubator adaptable to any size egg, from Bantam to Ostrich.

The "Mandy Lee" is GUARANTEED to hatch Bigger Chicks, Stronger Chicks and More Chicks that live than any other incubator or even the mother hen.

READ-E GUARANTEE that the new Mandy Lee Incubator, equipped with our new Automatic Regulator for handling Heat, Moisture, and Ventilation, will, on a series of competitive hatches of eggs taken from the same flock, beat any other incubator in the world from five per cent to iwenty-five per cent and in any climate, season, or altitude. We guarantee further that it will bring BETTER, LARGER. and STRONGER chicks; also, that it will bring MORE and BETTER chicks than can be had from hens covering the same number of eggs. We guarantee our largest incubators to do equally as good work as any of our smaller sizes. Our instructions must be followed and, in competitive hatches, eggs from the same flock must be used. GEO. H. LEE CO.

## "MANDY LEE" INCUBATORS - Continued

#### THE HEATING SYSTEM

THE HEATING SYSTEM insures the same degree of heat to every egg and is an exclusive Lee feature. The HEATING SYSTEM insures the same degree of near to every egg and is an exactly the term of the heating Heat can be adjusted from end to end, and in the larger sizes from center to back and front. The heating pipes can be removed instantly for cleaning by drawing them out without removing the top. The hot air does not come in contact with the eggs as in other hot air incubators, but warms them by radiation through the air-tight metal pipes. The control and adjustment is so perfect that the heat will vary but a fraction of a degree, even should the outside temperature change as much as 20 degrees.

#### The features of the "Mandy Lee" Heater

All parts exposed to heat are fully protected by sheet metal and asbestos.

A special burner with high wick tube and wide flame slot.

#### **NEW SINGLE WALLED CHIMNEY.**

Increases the heating capacity, reducing the oil expense and lowering the outside temperature of the heater. It is also self seating and is always in place.

- A SPECIAL VENT for any gas forming in the lamp. A PERFORATED SHEET METAL CYLINDER in top of heater which puts out the lamp in case of accident.
- A PROTECTING CIRCULAR SHIELD guarding the body of the Incubator. A SELF-SEATING CHIMNEY.

A LAMP BOWL IN ONE PIECE.

AS A FURTHER PRECAUTION the lamp cannot be filled without removing it.

The "Mandy Lee" is built of air-seasoned California redwood, is of handsome cabinet construction, with cherry finish, has heavy brass and bronzed metal trimmings, double glass doors and the double walls are insulated with from 1 ½ to 3 inches of asbestos or mineral wool. No other incubator is so well built.

#### Prices and Sizes of "Mandy Lee" Incubators

All complete with Lamp, Hygrymeter, Thermometer, Moisture Pan, Combination Egg Tray and Egg Tester. Prices quoted are packed for shipment F. O. B. Portland.

	Wt. Crated	Price
120-Egg—The right size for the small breeder	133 Lbs.	\$21.00
150-Egg—The new size—convenient and economical	160	24.00
200-Egg—Very popular; a special value at the price	200	27.00
240-Egg—This size for the larger plants; much in demand	216	30.00
300-Egg—This is the ideal machine and can be increased to 600 or 900-egg	285	35.00

## MANDY LEE BROODERS

The Only Brooders That Provide Natural Broodings Conditions.

#### DIRECT CONTACT HEAT

- "Mandy Lee" Direct Contact Heat Brooders are the most successful and satisfactory made. No improvement seems possible; no change necessary. The idea of applying a soft contact heat direct to the backs of the chicks was never incorporated into anything practical until Lee be-gan the manufacture of the "Mandy Lee," nor until that time had the correct principle of brooding been recognized, namely, that the little chick cannot comfortably breathe the same heat required for giving the necessary warmth to its body. We cannot better illustrate this theory than by repeating the following:
- FOR INSTANCE: Some night when you are lying in bed snugly covered and comfortably composed for sleep, just put a thermometer under your clothing next to your body, and take the temperature of the air immediately surrounding your real self. You will find it to be somewhere between 95 and 98 degrees. Now suppose that instead of this method of comfortably warming yourself, you should go and lie naked in a room heated to even 95 degrees. You can imagine how uncomfortable you would be. Perhaps you may recollect some hot summer evening when you rolled and tossed all night, unable to sleep on account of the heat. This is because you cannot be either comfortable or healthy if your head is as warm as your body. Buy a Brooder with Blankets.
- THE HOVER—A long, narrow hover—the ideal shape-heated evenly from end to end by a triple set of overhead pipes, one pipe passing entirely through and carrying out all the smoke, gas, etc., from the lamp, which is located outside the brooder.

**Again**, a second pipe carrying cold, pure air into the hover, which is heated by the first pipe, and that heated air heats the blanket to the **temperature of a hen's body**.

The hover blanket is made of regular bed blankets, shaped in the form of a semi-circle, hanging loosely and in the center to within an inch of the floor, and with curtain front and back. (See sectional view.)

SOFT-CONTACT HEAT ½Here is how the chicks get that soft, contact heat, so natural, so necessary to their comfort, and so entirely absent in other brooders.

The little chicks lay with their backs up against this warm blanket, just like a hen's body, and their heads out in the open air, just like the illustration above.

There is no crowding here, no smothering, no trampling. Each chick gets just as much heat as it wants and no more. In other brooders all the chicks must get the same amount of heat, but not so in the Mandy Lee. It's a natural mother for them.

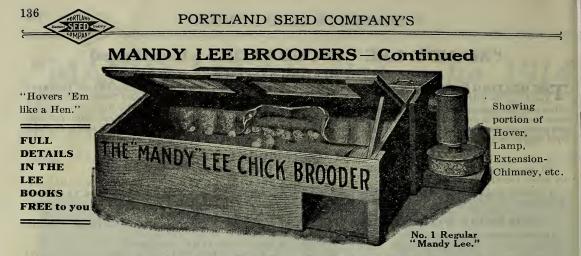
——" Mandy Lee" Brooders Come in Eight Sizes and Styles\_\_\_\_\_\_

THE NO. 1, OR REGULAR; which we recommend for all general purposes.

THE NO. 2, OR SECONDARY, fills a demand for a practical, economical method for caring for chicks from three to eight weeks old. **3 Styles of NEW FIRELESS BROODERS,** which have given splendid satisfaction, and are very popu-

lar as they are safe and economical

THE NEW OUTDOOR HEATED BROODER-See following pages.



ADVANTAGES OF THE LEE BROODER.

No lamp fumes or superheated air in the hover.

Glass Front forming a comfortable exercising room for the little chicks, with similar space at back. Opens up and cleans easily, an important feature.

All Cloth and Blankets are on wood strips, easily removable for cleaning or replacing.

Lamp Flame is always in plain sight, lamp easily removed.

A Lamp Burner that does not heat and that successfully burns medium grade oils.

## No. 1, or Regular "Mandy Lee"-Illustrated above

Outside dimensions, 3x4 feet. It is as large as any 200-chick brooder on the market, but we call it only 100-chick size — 50 chicks on each side of the hover. It will hold more, but it doesn't pay to crowd. Better have 50 healthy chicks in your brooder than 100 weak, sickly ones. The cost of a few brooders is insig-nificant as compared to the value of the season's hatch. **PRICE, complete, including Box Germozone, Drinking Fountain and Thermometer, \$15.00.** 

## **60 CHICK BROODER** Heated

Lamp, heater, hover construction, cloth and metal parts, and width exactly the same as our "regular" brooder. Length of hover 30 inches; openings in swinging door covered with 60-mesh brass-wire cloth, and, when lowered either folds directly against hover opening or rests on flanged front of runway, making a rat and cat proof exercising space for the chicks.

Price, \$6.50.

GERMOZONE in the drinking water keeps chicks healthy

Liquid or Tablets. 50c

## No. 2 Secondary Brooder

This is a larger, more roomy and less expensive brooder for older chicks or those from three to eight weeks It is all hover, and, while of age. occupying no more floor space than the other brooder, gives fully twice the actual brooding capacity. It is simply a mother for the chicks that are too

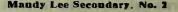
large for the ordinary brooder, but not old enough to "hustle for themselves" during the damp weather or cool nights.

Once used this brooder is almost indispensable. It seems to fit into a place no other brooder can occupy. It  $^{c}$ an be used anywhere-in a poultry house, barn, shed, piano boxjust so it is protected from wind and storm. Price, \$9.50

The only low priced serviceable Heated Brooder on the market.

The "60 CHICK" Heated Bruoder

GET THE LEE BOOKS and READ UP!



#### COMPLETE SEED ANNUAL



**OUTDOOR** Heated Brooder

## **NEW LEE BROODERS**

OUTDOOR, HEATED and **REGULATED BROODER** 

Instead of the usual single floor we have a double floor 3x4 feet, the lower floor being directly on the ground where the chicks come in contact with mother earth even in most inclement weather. We have the Mandy Lee contact heat under a warm Blanket — a long, narrow hover with a curtain on both sides - just like our regular brooder --just like the old mother hen. The regulator is the same style as on the Capacity 100 to 150. incubator. Weight 115 lbs.

Price, 4-foot size, \$20.00.

No. 25 OUT-DOOR FIRELESS BROODER **New Outdoor Fireless No. 25** 

Has rain proof top, glass front, large feeding compartment and removable board floor. A thoroughly practical and safe brooder. 2x4 feet, see cut. Price, each, \$10.00.

#### **New Indoor Fireless**

A fireless brooder for use inside, having the advantages of an adjustable hover that can be placed over the chicks, bringing them together gently and safely. A very convenient and usefu brooder. See Lee catalog for complete details. Price, each, 100 chick size, \$4.00.

## "Mandy Lee Fireless Brooder" Safe, Economical, Practical

FIRELESS BROODERS offer many advantages in economy, safety and convenience, and under equal conditions will rear stronger, healthier, larger chicks than a heated brooder. We have had wonderful

results with the "Mandy Lee" and recommend it as the Best Fireless Brooder. A feature of the "Lee Fireless" is the adjustable hover; made as light as possible, being a special weave of open mesh flannel stretched on a frame in such a manner as to give a proper circulation of air and even distribution of heat.

THIS ADJUSTABLE HOVER is the most important improvement in Fireless Brooders, and can be raised or lowered according to the outside temperature or to suit the size or number of chicks. The adjustment is easily made from the front of the Hover without opening the top. Besides this new Adjustable Hover, "MANDY LEE" FIRELESS BROODERS have double doors,

properly arranged ventilators, metal covered top and rain shield. All parts are readily accessible for cleaning and airing.

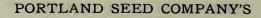
Fireless Brooders, like other brooders, should be kept in a place of even temperature as far as possible, and as the warmth depends on the natural heat of the body, enough chicks should be together to maintain the proper temperature. This can be regulated by the Adjustable Hover. Don't overcrowd your Fireless Brooder; treat it like any other brooder and you will get larger, more

vigorous chicks that feather out earlier than those raised in the heated brooders.



**Cour Catalog of Poultry Supplies** Listing everything necessary for the profitable production of poultry and giving practical inform-

ation on poultry diseases, care and treatment, should be in the hands of everyone interested in poultry .- Let us send you a copy.





MANN NO. 5.

## MANN BONE CUTTERS

The Only Bone Mill That Will Cut Both Green and Dry Bone Will Not Clog.

THE Mann's Green Bone Cutter is offered to the poultry world on a warranty to produce a perfectly edible poultry food, with no waste, from any lot of green bones, with less labor and less annoyance than any other bone cutter.

We send the **Mann's** to any responsible poultryman with this understanding; if you are not satisfied that it meets every claim we make for it, notify us and we will give you instructions to return the machine, and will, upon receipt of same **refund purchase price**. Could you ask more?

The Mann's is the only machine which has a self governing feed, producing uniform pressure against the knife, whether the bone be hard or soft. You set the machine to suit your strength, and it never requires more power than you set it for.

## Mann's No. 5

Has four knives, large solid cylinder, and has the latest patent automatic governing spring feed which makes it one of the best low-priced bone cutters ever offered. We can furnish with crank, balance wheel, or mounted on iron stand. (See cut.)

Mechanism of the Mann's showing automatic force-feed, cylinder parts, etc. Mann's catalog gives all details.

## Mann's No. 7

NATA

Fresh Cut BONE Is the FOOD that makes HENS LAY

Interesting Booklet

BUGS and WORMS "

FREE

The New No. 7 is mounted on a strong iron stand, and has patent automatic governing spring feed. Large, open-hinged cylinder, giving instant access to all working parts, has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (See cut.)

## Mann's No. 71/2

Adapted to run either by hand or power without any change. The particular advantage of the  $7\frac{1}{2}$  is that while it is a complete power machine, it can be operated by hand just as easily as the No. 7. It is recommended even if you have no power at present, for should you get power in the near future, you need be at no further expense. It has all the improvements. It meets a long-felt want.

### Mann's No. 9

About the same as No. 7, except that it has a larger cylinder and greater holding capacity, different design and larger table.

### Mann's No. 11

The No. 11 is exactly the same as No. 9, with the power parts added. It has all the latest improvements. Capacity, 100 pounds per hour.

## Mann's No. 12-Power

Strictly a power machine, and full of business from top to toe. Capacity, 120 to 150 pounds per hour. Horsepower required, one to two. Just the machine for marketmen, extensive breeders, or any one who has large quantities of bone to cut.

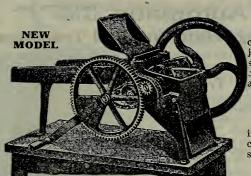
		Cutters	
A AVAI	New Styl	es Price	Wgt
	No. 5C	(with crank handle) \$ 7.75	30
	No. 5B	(with balance wheel) 10.00	55
	No. 5BM	(B. W. and iron stand) 13.00	80
Concer United	No. 7	(B. W. and iron stand) 15.00	107
	No. 7 ½	(hand or power) <b>21.00</b>	150 MANN NO. 7.
	No. 9	(B. W. and iron stand) 22.00	163
	No. 11	(power machine) <b>30</b> .00	215
	No. 12	(power machine) 35.00	260
IN'S NO. 11	No. 15	(power machine) 67.50	420

#### MANN'S HANDSOME 40-PAGE CATALOG

Is fully illustrated and tells all about the different style green bone cutters, clover cutters, corn shellers, grit smashers, etc., and contains much valuable information. Free on request.



MANN'S NO. 9.



## Wilson Dry Bone Mill No. 1

This is a practical mill, grinding all kinds of shell, crockery, grit, burnt or dry bone, feed, etc. Instantly adjusted to grind coarse or fine. Every poultry keeper should have one of these mills. You will find them very convenient and serviceable. Weight, 33 pounds. Diameter of hand wheel, 20 inches. **Price, \$5.00**.

## Wilson Mill No. O

A family grist mill in itself. Especially made for grinding flour, corn meal, spices, coffee, etc., for table use. It can also be adjusted for cracking grain. Capacity and size same as No. 1; hopper round. Weight, 30 pounds. **Price, \$5.00**.

## "New Model" Clover Cutter

The "New Model" Clover Cutter is designed for cutting, **either** green or dry, such growths as clover, alfalfa, vegetable tops, etc., into ½-inch lengths. These growths are the cheapest and most productive egg-forming poultry foods for cold weather.

The feature that gives the "New Model" easy supremacy over similar machines is the **cutting mechanism.** The machine can be kept in perfect order at all times, because the cutter bar is adjustable and easily accessible, and the four 7-inch spiral steel knives can readily be removed for sharpening. Those who are familiar with "ordinary" cutter construction will appreciate these improvements

"ordinary" cutter construction will appreciate these improvements. The "New Model" is made only of iron and steel, from entirely new patterns, it is a strong feeder, has large capacity, runs unusually easy and will do perfect work indefinitely. Length over all, 28 ½ inches.

The machine is intended to be mounted on a box or bench at any height to suit the operator. Weight, 60 pounds. **Price, \$10.50.** 

### **Bond's Grit Machine**

Will break rock, limestone, ore, crockery, glass, dry clam and oyster shells, etc. A boy of seven can work it. Drop the material in the top and work lever up and down quickly, but not with great pressure. Do not use green bone or wet oyster shells, but dry them. Weight, 25 pounds. **Price, \$4.00**.

## Mann's Corn Sheller

Best low-priced corn sheller made. A profitable tool if you have corn to shell. **Price, \$3.00.** 

## Mann's Clover Cutter

Made entirely of iron and steel; cannot warp or shrink. It cuts any kind of hay or clover, either dry or green, and more rapidly than any other make. Each revolution of the balance wheel produces twelve cuts. Do not buy a clover cutter until you have seen Mann's.

Price, \$10.50; mounted on iron stand, \$12.00.



Mann's Clover Cutter Mounted

Wilson's Mill No. 1

## Mann's Cast Iron Mortar

For breaking glass, crockeryware, oyster shells or other dry substances for poultry. Weight, 33 pounds; height, 12 inches; 9 inches square; pestle 4 feet long. **Price, \$3.50.** 

## Wire Netting for Poultry Runs, Trellises, Etc.

No. 20 Wire, in rolls 150 feet long, in the following widths:

			30 <b>-</b> in.		48-in.	60-in.	72-in.
2-inch mesh \$0.75 1-inch mesh 1.65					\$2.75 6.60	\$3.40 8.40	\$4.00 9.90
Short lengths, 2-inch mesh, 1c sq. ft.; 1-incl	h mesh, 30	Prices	s subject	to change	without	notice.	

#### "Union Lock" Netting

**Union Lock "Square Mesh" Poultry Netting.**— Made of two strands of No. 20 wire run horizontally with No. 19 steel wire vertical strips every three inches, the first seven cables 1 ½ inches apart; the next six are two inches, and all above are four inches. This makes the fence tight at the bottom, where needed for small chicks. This fence will fit any uneveness of ground, and because of its strength and construction requ es no top or bottom rail and only half as many posts as ordinary wire netting.

#### Price, Per Roll.

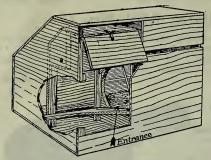
12-inch, 165 feet to the roll.	\$1.70	48-inch, 165 feet to the roll
18-inch, 165 feet to the roll	2.25	60-inch, 165 feet to the roll 4.80
24-inch, 165 feet to the roll		72-inch, 165 feet to the roll 5.50
36-inch, 165 feet to the roll		Galvanized Staples, per lb., 10c

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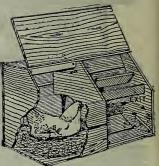
#### POINTS OUT THE DRONES The Success Automatic PROTECTS THE LAYERS Combined, Designating, Laying, Hatching and Trap Nest

Every poultryman knows the value of a Trap Nest. The trouble has been to get a satisfactory one. We offer the "Success" and will welcome your criticisms and enquiries. Descriptive pamphlet on request.



The "Success" Trap Nest Automatically separates the laying hens from the non-producers. Works without attention or care from you. Shows "Who's who" in your hen yard and you do not have to watch the hen. She releases herself. No other trap nest gives this advantage.

By the simple turn of a Screw Hook the "Success" can be converted into a regular trap nest that will hold the hen until released.



The hen passing in must step upon the board to get through onto the nest, her weight being sufficient to close the entrance. The action is free and well balanced, and does not frighten the hen in the least. As it has been proven time after time that hens will leave their regular nests and use the "Success" nest, prefering the seclusion which it gives.

For setting hens, the Success Nest is the perfect one, as it cannot be occupied by more than one hen at a time. **Prices:** No. 2 — Two nests, **\$3.50;** No. 3 — Three nests, **\$5.00;** No. 4 — Four nests, **\$6.50.** For use in Poultry Houses where the nests are built in, we can furnish the same nest K. D. without top or bottom board. **Price:** 2-nest, **\$2.75;** 3-nest, **\$3.75;** 4-nest, **\$5.60.** 



## Norwich Automatic Exerciser and Feeder

Every kernel of grain put into this feeder will go to your flock, not a single one will be wasted. Absolutely bird and rat proof. Rain or dampness cannot effect it. Saves its cost in 90 days by preventing waste, requires no attention except filling of hopper when empty. Adjustable for slow or fast feeding.

This is the most successful and practical automatic feeder ever invented; the slightest "peck" on the bait bar scattering the grain in the litter in a wide circle where all the fowls have ample opportunity to "scratch for it," affording just the right amount of exercise. Keeps them busy all the time.

Guaranteed to improve the flock, increase the egg production and save feed. Descriptive phamphlet on request.

MADE OF HEAVY GALVANIZED IRON.

No.	<b>1</b> 8	quarts	Each
No.	<b>2</b> —14	quarts	3.75
No.	<b>3</b> —20	quarts	4.75

## **Breeders Magic Egg Tester**

## The Manufacturers Challenge—

Any person in the world to hatch one egg the Magic Egg Tester registered unhatchable before incubation. No light. No electricity. No expense and lasts a life-time. Demonstrated at Poultry Shows everywhere. Sold by dealers and agents in every country on the globe. This simple, but wonderful instrument, **Shows the best and strongest hatchable eggs before incubation**; also the probable sex. Selects the eggs which will absorb heat and moisture alike; rejects the unhatchable ones, and shows correct moisture throughout the hatch.

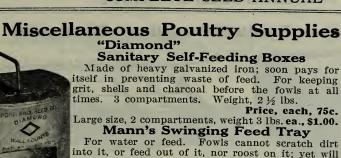
Don't set another egg until you have a Breeder's Magic Egg Tester. Price, each, \$2.00.



## **Thoroughbred Poultry and Eggs for Setting**

Send us your orders for Poultry or Eggs, **any breed or strain**, and secure the advantage of expert, critical selection, that guarantees full value for your money. We do not depend on any one breeder, but can give you the pick of the prize-winning strains at right prices.

OUR SPECIAL POULTRY SUPPLY CATALOG lists everything necessary for the profitable production of poultry and contains valuable information on poultry diseases, care and treatment. We want everyone interested in poultry to have this catalog and the "Mandy Lee" Books. Free.



For water or feed. Fowls cannot scratch dirt into it, or feed out of it, nor roost on it; yet will not tip over or spill the food out. Price, 18-inch, weight, 5 ½ lbs., \$1.25; 27-inch weight 6 ½ lbs., \$1.50; 36-inch, weight, 8 lbs.,

## **Diamond Galvanized Wall Fountain**

(See cut.)

Something new and serviceable. To be hung on the wall or against an upright post, at any height. The patented construction protects the water from becoming soiled. Anyone can easily see the con-venience of these.

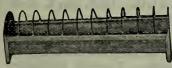
One gallon size, weight 2 lbs. Each, 60c.

Two gallon size, weight 2 1/2 lbs. Each, 75c.

#### Sanitary Stone Fountain

finished; made in two pieces and Stone Fountains easily washed and kept clean. They probably keep the water cooler than the gal-

\$1.85.



vanized fountains, but are heavier to hanand dle more liable to break Price, ½ gal.,

Wire Hen's Nests (See cut.)

durable; fasten to the wall; no harbor for vermin. Weight 10 ozs. each. **Price, each, 20c;** 

dozen, \$2.00.

Strongly made; very

35c; 1 gal., 50c. Wire-Covered Feed Trough

Large size, weight 1 ½ lbs.... Each 50c; 6, \$2.75.

**Galvanized Iron Drinking Fountains** Our Galvanized Iron Drinking Fountains embody every good feature of the down-to-date drinking fountains, and, we believe, are the best in use. They are easily filled, cleansed and kept clean. If placed in the shade in Summer time, the water will keep nearly as cool as in an earthen vessel. They are much lighter than the earthen ware fountains and are safer to ship. A dozen can be put in a compact package for shipment, as they nest together. We offer them at a very low price. Small size, weight % [1b.....Each, 30c; 6, \$1.70. Medium size, weight, 1 lb.....Each, 40c; 6, \$2.25.

Sanitary Fountain and Feeder.

For water, grit, chick food or grain, using ordinary Mason jar, either quart or half gallon.

Has galvanized pan that is quickly detachable. The best fountain of this type. Price, one size only, without jar, weight ½ lb. each.

Each, 20c; doz., \$2.00.

Extra Pans. 15 to 25c

## **Wire-Covered Feeding Trough**

Decidedly convenient for young chicks. (See cut.) Weight, 1 lb. Price, 35c.

## **China Nest Eggs**

Best grade Opal Eggs. Weight per doz., ¾ lb. Price, 3 for 10c; 12 for 35c.

**Diamond Hygiea Lice-Killing Nest** 

Egg

A combined nest egg and lice killer. By simply using it in the nests in the same manner as an ordinary nest egg is used, laying hens are cleared of lice and mites, and are able to occupy the nests with comfort. Do not accept the worthless sub-stitutes. Weight per doz., 2 lbs.

Price each, 10c, postpaid; per dozen, 60c.



NEST WIRE

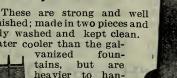
Lime Nest Egg

These are superior to the China egg as they are not so cold, which is better for the hens. They are also indestructible. Weight per doz., 2 lbs. Price, each, 5c; doz., 40c; postpaid, each, 10c.



3

**Galvanized Fountains** 







Mann's Swinging Feed Tray 2

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Miscellaneous Poultry Supplies Continued FOLDING FOG BOX ALDABLEEGS ANDMIST PC HANDLED WITH CARE

PORTLAND SEED COMPANY'S

142

#### Set Up Ready to Ship.

#### **Folding Egg Boxes**

Made of heavy corrugated paper. Only a few second's work to set the box up, pack it with eggs, and address it. These boxes are light but very strong, being firmly braced, and will stand the weight of several hundred pounds without crushing.

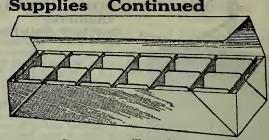
No.	Size		Weight	Each	Six	Dozen
3	15-Egg	1	ib.	\$0.15	0.80	\$1.50
4	30-Egg	1 1/2	1b.	. 25	1.25	2.20
5	50-Egg	2	ib.	. 40	2.25	3.25

#### **Ideal Paper Egg Boxes**

Intended for use in delivering eggs to private families. If you have a "select" egg trade, you should use this box. Nicely printed with a blank space for your name and address. Printed to order in two M. lots at no extra charge. They ship "knocked down" at very low rates. Weight 12 lbs. Weight 12 lbs. per 100.

Prices: 1-dozen size, 20c dozen; \$1.00 per 100; \$9.00 per 1000. Sample box by maii, 5c.





#### **Suwanee Egg Carton** Saves Breakage, Folds Flat

When filled fits into a regular egg case, 3 dozen in a laver.

Every man in the egg trade should use the Suwanee Egg Carton.

A light, but strong carton, holding one dozen eggs, and **built to fit a regular egg-packer.** Throw away your "fillers." Use this carton; packs three to a layer in an ordinary egg case, and is always ready for delivery. **Saves handling – saves** breakage. Built with double walls. Ask for sample. Weight with fillers, 3 ozs. each. Price, per doz., 25c; per 100, \$1.25; per 1000, \$10.00.

ADVERTISE YOUR EGGS .- In lots of 10,000 cartons we will print your name or any announce-ment you want to make, at the rate of **50c** per 1000.

#### P. S. Co.'s Shipping Coops.

All wood, neat, very light, but strong. Poultry raisers selling poultry at fancy prices should always use these coops. Weight Nailed K. D. Nailed No. 1. 10x21x18 10 ½ lbs. Each, 30c; 6, \$1.60. No. 2. 10x24x20 11 ½ lbs. Each, 40c; 6, 2.20. No. 3. 20x24x20 18 ½ lbs. Each, 50c; 6, 2.75.

## "Humpty Dumpty"

The best, the cheapest, the most convenient EGG CARRIER. The "Humpty Dumpty" is light but strong, being almost indestructi-ible. Can be folded flat for shipping empty. The most satisfactory egg carrier. Holds 12 dozen. Weight with fillers, 7 lbs. Price: Each, 50c; per 6, \$2.90; doz., \$5.50.

## **Egg Cases**

.....\$0.40 .20 ... 1.80

## The "Humpty Dumpty" **Collapsible Poultry Coops**

These are the neatest, lightest and strongest coops for shipping poultry that we have ever seen. They are well made, and will last for years Easily cleaned and stored. They are up-to-date coops, and make a good investment for any noultry raiser. impression. They are a mighty good investment for any poultry raiser. Coops are made in three sizes. All treated with oil. Order a sample coop.

No. 1 Coop. For 12 to 24 chickens, size 36x24x12, weight, 23 pounds. Price, \$2.00.

No. 2 Coop. For 24 to 36 chickens, size 48x30x12, weight, 33 pounds. This is the favorite size. Price, \$2.25.

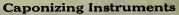
No. 3 Coop. For turkeys and geese; will carry 250 pounds of weight. Size 48x30x16.

#### **Hydro Safety Lamps**

Oakes .- Made especially for incubators and brooders; has a water jacket and is perfectly safe. No. 1 — Small Size, ¾-inch wick, weight ¾ lb.

Each, \$1.00. No. 2 — Medium size, 1-inch wick, weight 1 lb. Each, \$1.50.

No. 3 - Large size, 1 ½-inch wick, weight 1 ¼ lbs. Each, \$1.75. Price, \$2.30.



COOP COLLAPSED

COOP SET UP

The demand for capons exceeds the supply, the price per pound averaging more than twice as

much as that paid for ordinary roosters. P. S. CO.'s STANDARD, the best low priced set. Price, postpaid, \$2.00.

WIGMORE, a first-class outfit with book of in-Price, postpaid, \$2.50. structions.

FULL DETAILS OF THE MANY ADVANTAGES OF THE LEE INCUBATORS AND BROODERS ARE GIVEN IN THE LEE BOOKLET. SENT FREE ON REQUEST.



#### Supplies Miscellaneous Poultry

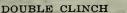
Leg Bands For Poultry and Pigeons (See Cuts) Every chicken must have a leg band on before it can be entered in a poultry show. In ordering Leg Bands, be sure to state size wanted, or breed of fowls bands are to be used on, and number wanted for males or females.







SMITH SEALED



DOUBLE CLINCH .- A new band, very safe; no exposed corners, ends or loops; has double fasteners.

Prices, postpaid, 12 for 15c; 25 for 30c; 50 for 50c; 100 for 75c. SMITH SEALED.— Of aluminum and so con-

structed that by simply crushing a soft rivet they are sealed on the bird's leg, and must be

destroyed to be removed. See cut. Prices, postpaid, 12 for 25c; 25 for 50c; 60 for \$1.00; 100 for \$1.25. PIGEON BANDS.— We can supply the Double Clinch or Sealed Band at above regular prices, or the Open Band - you simply clasp it on at price of Eclipse.

#### Smith Sealing Tool.

Made especially for sealing the Smith leg bands. Plain jaw, 50c; lettered jaw, any letter, 75c, postage 10c.

#### **Petty's Poultry Punch**

Latest, most convenient Poultry Punch; can be put on a key ring or used for a watch charm. Will not clog. Thoroughly practical. Price, postpaid, 25c.

#### **Insect Powder Gun**

There is no need to waste any powder if you use this small hand powder blower. Detachable bottom for filling. For use in applying insect powder of any kind on poultry, dogs or cats. Price, each, small, 15c; large, 30c, postpaid.



LEADER BAND

ECLIPSE .- Flat aluminum bands, no sharp corners or edges; easiest flat band to put on. Prices, postpaid, 12 for 20c; 25 for 35c; 50

- for 60c; 100 for 85c.
- LEADER .- Latest and best adjustable leg band out. Has neat, compact, and smooth fastening, with no catching points; easily attached and is absolutely secure.

Prices, postpaid, 12 for 20c; 25 for 35c; 50 for 60c; 100 for \$1.00.



DOUBLE CLINCH LEG BANDS PIGEON SIZES

**Reliable Poultry Marker.** 

For marking the web between the toes. One of the best and handiest markers. Postpaid, 35c.

#### Poultry Killing Knife.

French, best and most popular. Price, postpaid, 50c.



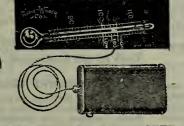
## THERMOMETERS

#### For Incubators--Tested. Fig. 8.— Cornell Style...... .\$1.00

back	.75
Fig. 10 P. S. Co.'s Straight Metal back	
Fig. 14 Triangle shape; best incubator	
Thermometer made. Certified correct;	
worth the additional cost	1.00

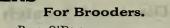
ly register the extremes of heat and cold.

Fig. 3.— Hotbed Thermometer, for plunging in the bed to know when the temperature is right for This knowledge may save much loss and delay. Each, postpaid, \$2.00. planting.



### MANDY LEE EGG TESTER.

This Egg Tester is made to use on a lamp and will fit the ordinary No. 2 burner. The same tester is furnished with all Lee Incubators. Price, 50c postpaid.



<b>Fig. 12.</b> — Peep O'Day <b>\$</b> 0	. 69
Fig. 2.— P. S. Co.'s: for any style brooder	.50
Mandy Lee style	. 60
For General Use	

Cabinet. --- 8-inch wood back, nice finish... .40 Fig. 4 .- Household, 7-inch, black enamel, . 25 tin case.....

Fig. 1.- P. S. Co.'s Self-Registering - A necessity for Greenhouse and Poultrymen. Will accurate-

Price, postpaid, securely packed, \$4.00.

#### The Wilder Illuminated Thermometer

Instantly indicates the temperature without opening doors. So simple that a child can attach it to incubator.

Everyone who owns an incubator knows how hard it is to read the thermometer correctly through the glass doors, and it is not always advisable to open them. But with the "Wilder" you simply press the button and the temperature is plainly indicated. Where several incubators are running, wires can be so placed that a single battery is carried and plug inserted for readings. Batteries and parts can be replaced at small cost if broken or exhausted. Wilder thermometers are absolutely dependable and are fully guaranteed ..... Price each \$2.75.

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Our trade mark on every original package is your protection. Demand it of your dealer, as there are many dangerous substitutes.

## The Making of Diamond Chick Food

The select grains that are used in the preparation of Diamond Chick Food are cut by a special process screened to a uniform size and run through a Fanning Mill to remove the dust and meal, which is the fatal element in most Chick Foods. After this process the ingredients are carefully weighed and mixed in correct proportions. No guess work.

By using Diamond Chick Food you are giving the chicks just what Nature intended they should have, a food composed of grains (cracked), small seeds, bone, dried sweet meat (to take the place of insects and bugs), charcoal, etc., mixed in the right proportions to produce a quick and profitable growth without loss. It's so convenient, so handy, always ready for use, and you can raise so many more chicks by feeding it that it is the **cheapest food you can buy.** A trial is all we ask.

Ask for descriptive pamphlet or Directions for feeding in each sack or package.

Price: 5 lbs., 25c; 12 lbs., 50c; 25 lbs., 90c; 50 lbs., \$1.60; 100 lbs., \$3.00



Diamond Brand, Special. A new beef product, perfectly prepared, fine ground and clean.

The highest feeding value yet produced.
Price: 4 lbs., 25c; 50 lbs., \$2.25; 100 lbs., \$4.00.
STEEL CUT, granulated, clean and free from dust, hide, hair, etc. There is no waste; can be fed like grain if preferred. Every poultry keeper knows the value of this food.

Price: 5 lbs., 25c; 50 lbs., \$2.00; 100 lbs., \$3.75.

#### **Fish Scrap**

Made from sweet, clean Halibut. A high grade poultry food, rich in protein (65M) relished by fowls — furnishing a clean, healthy meat ration. No chemicals or acids used in its manufacture, and it is free from meal and dust.

Price, per lb., 5c; 100 lbs., \$3.00.

#### **Fish Meal**

A fine ground, pure, sweet fish meal, containing 65M protein — feed as you would meat meal; a rich, wholesome food for poultry. **Price, per lb., 5c; 100 lbs., \$3.00.** 

To be fed dry or wet. Starts non-Starts hens laying and keeps them at it. Puts poultry in prime condition. Makes young grow fast. No Drugs—No Stimulants-Makes young fowls -but a rich, wholesome, nourfshing food. Put up in 100 lb. bags, full weight.

Price, per lb. 3c; 100 lbs., \$2.00

Look for the trade mark—be sure it's "Diamond"

#### **Diamond Growing Food**

Our special formula for promoting a rapid, healthy growth and should be fed after the third or fourth week; nothing else needed; will quickly produce large, plump "Broilers." large, plump

Price, per lb., 3c; 100 lbs., \$2.50.

#### **Diamond Pigeon Food**

This special combination for pigeons is unequalled for squab raising, feeding for exhibition or as a regular working ration.

Price, per lb., 3c; 100 lbs., \$2.50.



## Portland Seed Co.'s Diamond Poultry Foods-Con'd.

#### HIGH GRADE MEAT MEAL.

A highly concentrated food. Being cooked meat, dried and ground. Very rich in protein. It should be mixed with the soft food. No hides or tankage in our meat meal, but, as its name implies, meat, cooked, dried and ground; unexcelled for egg-production

#### DIAMOND GRADE.

1 lb., 10c; 10 lbs., 50c; 100 lbs., \$4.00. STANDARD.— Good grade.....100 lbs., \$2.50. **GRIT**.

Every poultry raiser should keep a supply of this grit in each pen. Made in two sizes, chick and hen size. We always send hen size unless otherwise ordered.

#### DIAMOND CRYSTAL.

Price: 5 lbs., 10c; 100 lbs., \$1.00.

#### CHARCOAL.

Our Charcoal is guaranteed, prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion; a health preserver. Prices: 1 lb., 10c; 10 lbs., 50c; 100 lbs., \$3.50.

#### **GRANULATED BONE.**

Our "Diamond Brand" is made from selected hard, white, raw bones, and of a superior quality; an indispensible food for laying hens.

DIAMOND. Price: 10 lbs., 30c; 100 lbs., \$2.75. STANDARD. Price: 100 lbs., \$2.25.

#### **BLOOD MEAL**

The most highly concentrated egg-producer on the market. To be fed in soft food. Unexcelled as a food for forcing growth of chicks or as an egg food.

DIAMOND.- Price: 1 lb., 10c; 10 lbs., 50c; 50 lbs., \$2.00; 100 lbs., \$3.60.

#### **OYSTER SHELLS, CRUSHED.**

We offer nice clean stock, free from dust and These should be within reach of your hens waste. at all times. In two sizes, coarse and fine.

DIAMOND. Price: 5 lbs., 10c; 100 lbs., \$1.25.

STANDARD POULTRY SHELL .- A very good grade of mixed sea shell - sold by some dealers as oyster shell — but is not so good and has more waste. 80c per 100 lbs.

CLAM SHELL-Choice. 5 lbs: 10c; 100 lbs. 90c

#### **BIRD SEED.**

Not for	Planting.	Special	Prices in	Quantity.
P. S. Co.'s	Best Mix	edPei	r lb., pos	tpaid, 20c.
Canary, b				
Hemp .				
				tpaid, 20c.
Rape				
Cuttle Bon	ne, large bo	one	. Postpai	d, 2 for 5c.

#### TOBACCO DUST.

For use in baths and nests. A cheap and effective exterminator of lice.

Price: 1 lb., 10c; postpaid, 25c; 100, \$5.75.

#### ALFALFA MEAL.

The best substitute for green food for Winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts.

Price: 1 lb., 5c; 10 lbs., 30c; 100 lbs., \$1.35.

#### POULTRY PEPPER.

A good tonic and invigorator; ground. Price: 1 lb., 25c; 5 lbs., \$1.00.

## **Miscellaneous Remedies.**

## **Diamond Poultry Remedies**

These are manufactured exclusively by us and we fully guarantee them.

- DIAMOND POULTRY DIP-Certain eradicator of insects and disease on all animals. Insures healthy conditions. A general disinfectant and cleanser. Kills cockroaches, water bugs, ants and all insects. Cures gapes, bumble foot, chicken pox, scaly legs, etc. Keeps your yards and houses santary. One gallon makes 100 gallons. Prices: Qts. 50c; doz., \$5.00; Half Gal., 85c;
- Gal., \$1.50; doz., \$14.50.
- DIAMOND MICROZONE .- Will cure Roup, Cholera, Swelled Head, Sore Eyes, and most all Chicken Diseases. Every poultry keeper should have a bottle of this on hand. Liquid, cannot be mailed. Price, per bottle, 50c.
- DIAMOND CHOLERA CURE.- Comes in powder form. Soluble in water. Postpaid, 50c.
- DIAMOND ROUP CURE .- Comes in powder Postpaid, 50c and \$1.00. form.

## Lambert's Lice Remedies

- DEATH TO LICE .- Five oz., 10c; 15 oz., 25c; 48 oz., 50c; 100 oz., \$1.00. **DEATH TO LICE — SPECIAL.**— Dissolve in ker-
- osene. 4 oz., 10c; 16 oz., 25c. DEATH TO LICE OINTMENT.— For lice on
- chicks, scaly shanks on fowls of any kind. 1 oz., 10c, postpaid; 3 oz., 25c, postpaid.

AVENARIUS CARBOLINEUM.- For preserving any kind of timber above or below ground. Quart can, 50c; gal., \$1.40; 5 gals., \$6.00.

## SPRATT'S CAT FOODS

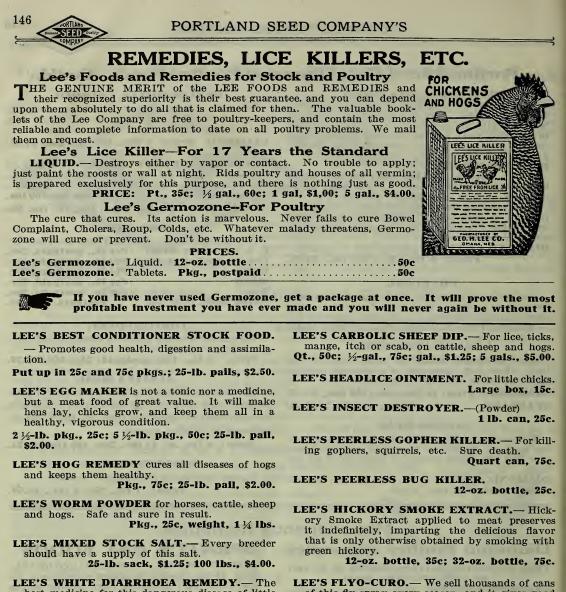
- "Spratt's" Cat Food .- A complete food for Cats. Used at the leading Catteries throughout the world and daily becoming more popular among the fancy. Cartons, 25c.
- 'Spratt's" Malted Kitten Food.-- Thousands of kittens that are somewhat delicate at birth or that are without stamina, die for want of proper food and nourishment. For these little fellows, we strongly recommend this food. It is very highly prized in England and is daily becoming more popular in this country.
- Price, 25c per tin, postpaid to any address, 35c. Spratt's" Fish Cat Food.- Use this as a change
- of diet, especially during the Summer months. Cartons, 25c. Spratt's Tonic and Condition Tablets-For

Cats.			50c.
Spratt's	Distemper	Tablets For Cats	75c.
Spratt's	Vermifuge	Capsules.— For Cats.	50c.

Spratt's Poultry Soap Kills Lice and Mites. It is of the greatest value to poultry owners as it is entirely free from poison and at the same time most effective in the destruction of lice and mites and by keeping the skin free from scurf prevents skin diseases. It is the only soap that should be used for preparing poultry for exhibition. Equally good for washing pigeons, canaries and others' of the feathered tribe

Price per Tablet, by Mail postpaid, 25c.

"SPRATTS DOG CULTURE"—See page 148.



best medicine for this dangerous disease of little 12-oz. bottle, 50c. chicks.

of this fly spray every season, and it gives good Qt., 35c; 1/2 gal., 60c; gal., \$1.00. satisfaction.

## International Stock and Poultry Foods, Remedies, Etc.

Every package of "INTERNATIONAL" is guaranteed to fulfill every claim made for it, or your money back for the asking. We sell "INTERNATIONAL" on its merits. You are the judge. Full directions on each package.

## For Poultry

INTERNATIONAL POULTRY FOOD. Pkgs., 25c, wt., 2 lbs.; 50c, wt., 3 ½ lbs.; and \$1.00, wt., 7 lbs.; 25-lb. pail, \$3.50. INTERNATIONAL LOUSE KILLER.— Weight,

- Weight, 1 1/2 lbs. Pkg., 25c. INTERNATIONAL LICE PAINT.

35c and 60c cans. **INTERNATIONAL SCALY LEG OINTMENT.** 

Box, 25c, postpaid. INTERNATIONAL CRESUL. ½-pint can, 25c.

**INTERNATIONAL ASEPTIN.** Per box, 25c, postpaid.

INTERNATIONAL ROUP CURE.

Per box, 50c, postpaid. **INTERNATIONAL RHEUMATISM OIL.** 

Per bottle, 25c. Box, 25c, postpd. **INTERNATIONAL SUDAL.** INTERNATIONAL CHOLERA CURE.

Per bottle, 25c. INTERNATIONAL WORM PILLS. 50c, postpd INTERNATIONAL BOWEL TROUBLE REM-EDY. Per box, 50c, postpaid.

### **For Stock**

**INTERNATIONAL STOCK FOOD.** Pkg., 25c, wt., 2 lbs.; 50c, wt., 4 lbs.; 7-lb. pkg., \$1.00; 25-lb. pail, \$3.50.

**INTERNATIONAL HEAVE CURE.**— Weight 1 ¼ lbs. Pkg., 50c\*

INTERNATIONAL GALL CURE. Box, 25c; 50c, weight, 10 ozs.

**INTERNATIONAL WORM POWDER.** Pkg., 50c, weight,  $1\frac{1}{4}$  lbs.

**INTERNATIONAL PHENO-CHLORO.** 25c, 50c and \$1.00 cans.

INTERNATIONAL HARNESS DRESSING. Price, 25c, weight,  $1\frac{1}{4}$  lbs.; large can, 50c. weight,  $2\frac{1}{2}$  lbs.

INTERNATIONAL HONEY TAR FOOT REM-50c and \$1.00 cans. EDY.

INTERNATIONAL COLIC CURE. 50c and \$1.00 bottles. INTERNATIONAL SILVER PINE OIL.

25c, 50c and \$1.00 bottles.

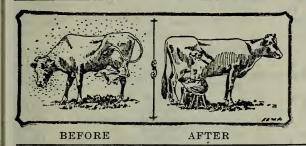
#### COMPLETE SEED ANNUAL



## KOW KURE-The World's Greatest Cow Medicine

**KOW KURE is not a stock food,** but a specific remedy, especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water, Swelling of the Bag etc. It prevents abortion and removes retained after birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. Makes poor cows good, good cows better, and makes more money for cow owners. It increases the milk flow, and enables the cows to produce strong vigorous calves. **Kow Kure** is the dairyman's gold mine and a sure profit-payer.

Price: 50c can, 1 3/4 lbs. \$1.00 can, 3 1/2 lbs.





## SO-BOS-SO

Protect Your Stock from the Torture of Flies.

No other Fly Killer we have ever known will give as good results. Cows give one-third more milk and horses dobetter and on less feed, when protected from fliesby **So-Bos-So**. It requires only a few seconds to apply it and costs less than  $\frac{1}{2}$ ca day per head. You cannot afford to be without it. Apply withcloth, sponge, or sprayer. See page 122.

In 1-gallon sealed cans only, price \$1.25

## AMERICAN DAIRY ASSOCIATION REMEDIES

**Stock Markers** 

**BAG BALM.** A soothing, penetrating ointment for all affections of the bag.

50c packages, wt., ½ lb.GRANGE GARGET<br/>and positive cure.CURE. An unsurpassed<br/>50c cans, wt., 2 lb.

## BLATCHFORDS CALF MEAL

A Perfect Substitute for Milk at 1/3 the Cost.

Calves, Pigs, Colts, Lambs—are healthier, harder, and grow faster when fed on Blatchfords Calf Meal.

100 lbs. makes 100 gallons

A complete food Prevents scours Price, 25 lbs. \$1.25; 50 lbs. \$2.25; 100 lbs. \$4.00

### Proteina (Soy Bean) Oil Meal 46 % Protein, 10% Fat.

Contains 4 times the feeding value of grain. A most valuable and satisfactory concentrated food for cows, calves, pigs, poultry and all farm animals; superior in every way to Linseed Oil Meal. Full information and descriptive literature on request. Price, Ib., 5c; 50 Ibs., \$1.50; per 100, \$2.50; ton, \$45.00.

# HORSE COMFORT.For wire cuts and all fleshwounds25c and 50c bottles.AMERICAN HORSETONIC.A general im-<br/>prover for horses.25c boxes: postpaid, 35c.



## **Dried Beet Pulp**

To be fed dry or moistened. Dry shredded sugar beets improved in feeding value by removal of the sugar. Fed half and half with other grains will greatly increase the milk flow. Highly recommended for dairy and show stock; a safe, economical food.

Price, per lb., 3c; 50 lbs., 85c; 100 lbs., \$1.50; ton, \$28.00.

#### IDEAL EAR BUTTONS. Pure Aluminum Hardened.

Medium size, suits all animals, clinches tight, can not come out; double strength. Name and address on top side; number on bottom. Easily attached with special punch and pliers.

PRICES.

25\$1.25	500\$15.50
50 1.90	1000
100	
Punch and Pliers	@1 0F

Add 10c per 100 if sent by mail, and 10c for Punch and Pliers.

Not more than 19 letters can be used for name and address.

#### Markers for Cattle, Hogs and Sheep.

Your name on one side, numbers on the other. Not more than eleven letters can be used on the hog and sheep size; 15 letters on cattle size.

PRICES	Two Sizes: Sheep and Hogs Cattle	
100 with	name and number 1.67 2.15	
50 with	name and number 1.15 1.40	
25 with	name and number	
100 with	name only, or number only. 1.25 1.65	
50 with	name only, or number only85 1.15	
25 with	name only, or number only60 .75	
100 00	ttle size 21/ lbs por 100: 100 Shoop size	

100 Cattle size, 2 ½ lbs. per 100; 100 Sheep size, 1 lb. per 100.

Oval Ear Punches, Cattle size, weight 1¼ lb. each, \$1.65; Sheep and Hog size, \$1.25. Postage, 10c each.

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Farmogerm       51       Oats       48-49       Vines       99         Ferns       98       Onion Sets       31       91       99         Feterita       55       Ornamentals       93       W       91         Feders       140-141       Water Lilies       91         Fertilizers       58-59       P       Weed Killer       125         Fertilizer Drill       59       Palms and Pot Plants       98       Weeders       115-117         Florist's and Nursery Sup-       EPeonies       92       Wheat       56						
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$p_{105}$		16-127	Pansy Plants.	_	Wire Netting 139	



"SPRATT'S" MEAT "FIBRINE" VEGETABLE **DOG CAKES:** 

The standard dog food. Used at the leading kennels and dog shows throughout the world; a staple and constant food for all breeds of dogs.

Price: Cartons, 25c; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00. "SPRATTS" PUPPY BISCUITS.

A perfect and whole food for puppies of all breeds. Cartons, 25c; 25 lbs., \$2.25; 50 lbs., Price: \$4.25; 100 lbs., \$8.00.

SPRATT'S TONIC and CONDITION TABLETS. To build up after sickness and to put in bench show form, etc. 50c.

## "SPRATT'S" DOG FOODS AND REMEDIES

We are selling agents for these famous preparations which have the endorsement of the big Breedersand Fanciers-and are the standard in their line.

We can only list a few items in this catalog, but will mail free to Dog owners: "Spratts Dog Culture" which gives reliable and interesting advice and information on the care of dogs and tells about "Spratts" preparations.

SPRATT'S PLAIN PUPPY MEAL-The Standard Weaning Food. This meal should be used before, during and after the weaning period to insure large, vigorous and healthy puppies. Also an invaluable food for dogs of any age out of condition. Follow directions. Cartons, 10c.

### "SPRATTS" BULLDOG MEAL.

Specially prepared for dogs of this type, also a valuable temporar diet for dogs "off feed." Price: Cartons, 25c; 25 lbs., \$2.25; 50 lbs., \$4.00; 100 lbs., \$7.50.

SPRATTS	DISTEMPER	TABLETS May	also
	as a preventiv		75c.
SPRATTS	WORM CAPS	ULES.	50c.
SPRATTS	MANGE REM	MEDY.	50c.
SPRATTS	WHITE DOG	SOAP For flees,	etc.
makes a	glossy coat.	Cake,	25c.

FOR SPRATT'S CAT FOODS AND REMEDIES SEE PAGE 145

## New Parcel Post Rates—Jan. 1, 1914

PARCEL POST RATES are based on DISTRICTS and ZONES. THE DISTRICT includes the office where mailed and the rural routes therefrom.

A RATE OF 5 CENTS for the first pound and ½ cent per pound for each additional pound up to 50 pounds (the district weight limit) is charged between points in this district.

THE 1st ZONE covers a radius of 50 miles from the point of mailing; the rates are 5c for the first pound and 1/2 cent for each additional pound, up to the limit of 50 pounds.

THE 2nd ZONE covers a radius of 150 miles, and the rate is 5c for the first pound and 1 cent for each additional pound; weight limit of 50 pounds.

A WEIGHT LIMIT OF 20 POUNDS APPLIES TO THE 3rd, 4th, 5th, 6th, 7th and 8th ZONES. ZONE RATES increase with the distance -- see table.

look for the Zone that corresponds to the distance you are WHEN YOU ORDER FROM PORTLAND away. Then note where the weight of your package is marked on the table of rates, on the same line under your ZONE will be shown the amount of postage to be added when ordering. We have catalogued the weight of most items mailable by parcel post, and by the aid of the table here shown you can always figure your postage.

#### SIZE AND WEIGHT

3rd 8th 2nd 4th 5th 6th 7th 1st Zone Zone 50 Zone All Zone 150 A Parcel Post package Zone 300 Zone 600 Zone 1000 Zone 1400 Zone may weigh from four ounces WEIGHT Local rate 50 to 150 to 300 to 1000 to 1400 1800 over 1800 to fifty pounds for the first 600 rate and second zones-with a miles miles miles miles miles miles miles miles twenty pound weight limit pound \$0.061 \$0.07 \$0.08 \$0.09 \$0.11 .21 \$0.12  $\frac{1}{2}$ .14 .17.25pounds .08 .11 for third to eighth zones, 3 pounds .10 .20 .31 .36 Local and Second .15 and must not exceed in pounds .26 .32 .38 .12.33 .41 .19 Zone First Zone .51 .61 .71 size 72 inches in length and  $.23 \\ .27$ 5 pounds ,14 .41 Rate 5c Rate 5 cents 6 7  $.49 \\ .57$ pounds .16 girth combined. Four for first pounds for the .31 .44ounces or less will be .81 .91 1.01 pounds pound 89  $\overline{20}$ 35  $\overline{50}$ .65 first pound  $.\bar{2}\bar{2}$ .24charged for at one centper .73 .81 pounds 1c for .39 .561.08 and .43 pounds 1.20 eachad-.62ounce or fraction thereof. .68 .74 11pounds 1/2 cent for  $\overline{26}$ .47 .89  $\begin{array}{c} 1.11 \\ 1.21 \end{array}$ ditional pounds BOOKS. - On and after 12 28.51.97 each pound 13  $1.05 \\ 1.13 \\ 1.21$ March 16, 1914, the postpounds .30 .55 80 1.311.56additional up to 14 pounds 32 .59 86 1.411.68age on books weighing 8 oz. 15pounds pound up to weight 34 .63 92 1.51or less, will be 1c for every pounds 1.29 1.92 16limit, 36 .67 98 1.61the limit, 2 oz. or fraction thereof, and  $1.37 \\ 1.45$ .71 .75  $1.04 \\ 1.10$  $1.71 \\ 1.81$ 2.04pounds 50 .38 on those weighing more than 50 pounds. pounds 2.1640 pounds 2.28 oz., the regular ZONE pounds 2.202.40 RATES shall apply. 20 pounds .2.2 1.61 $\bar{2.01}$ 44 THE OLD RATE on Books of one cent for every two ounces must be paid Until March 16, 1914

These Rates DO NOT apply to SEEDS, SCIONS, PLANTS, ROOTS, BULBS and CUTTINGS Postage is 1c for 2 ozs.; 8c per lb., any distance. Weight and size within the Parcel Post limit. The 8th zone rate applies to ALASKA, MEXICO, CUBA, HAWAII, PANAMA and the PHILIP-PINES and allows Full Weight, 20 Lbs.

Postage to Canada on 4th class pkgs. of over 4 oz. and NOT EXCEEDING 4 Lbs. 6 Ozs., go at 8th zone rate.

ur FREE PREMIUMS Your Own Selections Your Own

As an expression of our good will and appreciation of your business we offer these premiums. If you wish to take advantage of these premium offers, be sure to make your selections when sending in your orders; otherwise they cannot be sent. They are given only with cash orders, at catalog prices. With a \$5.00 order Double the \$2.50 Pre-mium, or any 25c book, or 25c to apply on any book we list, or

With a \$2.50 order Your choice of Vege-table or Flower Seeds in packets or ounces to the value of 25c, or any 25c Lily, Dahlia, Canna or Gladioli Bulb.

With a \$10 order You may double the premiums on the \$5.00

book, or 25c to apply on any book we list, or your choice of any 25c package of Stock or Poultry Food or Remedy, or any of our Seed Potatoes, or Flowering Bulbs to value of 50c. With a \$25 order Three times the pre-mium on the \$10.00 order or \$150 to apply on any additional item order or choose any 50c book in our list. selected. TNOTE.—The amount allowed on premiums cannot be deducted from the price, but is allowed over the amount of the order.

IF YOU SELECT PREMIUMS LISTED ABOVE YOU ARE NOT ENTITLED TO OUR SPECIAL DIS-COUNT OFFER BELOW ON SEEDS IN PACKETS AND OUNCES.

Special Rates on Seeds in Packets or Ounces—Postpaid worth of Seeds FREE with every \$1.00 order for bottom ounces ounces. Remember, in packets and ounces \$1.25 for \$1.00, \$2.50 for \$2.00, and so on. with every \$1.00 order for Seeds in Packets and 25 cents packets and ounces only. This does not apply on quantities over one ounce, or where any other premium is taken. We pay one cent (in seeds) per name for good addresses. See back of Order Sheet.

NO PREMIUMS on GRASSES, GRAINS or FOODS, which are subject to market changes 

